

STRUCTURAL GENERAL NOTES

General

THE FOLLOWING GENERAL STRUCTURAL NOTES APPLY TO ALL OF THE STRUCTURAL DRAWING.

STRUCTURE TYPE

- 1 - SUBSTRUCTURE SHALL CONSIST OF CAST IN PLACE REINFORCED CONCRETE (RAFT FOUNDATION).
- 2 - THE SUPERSTRUCTURE CONSIST OF CAST-IN PLACE CONCRETE (R.C. COLUMNS - R.C. WALLS - R.C. SLABS - OTHERS)

CLASSES OF CONCRETE AND MIX SPECIFICATION

- 1 - CRUSHING CHARACTERISTIC STRENGTH OF REINFORCED CONCRETE AT 28 DAYS SHALL NOT BE LESS THAN 30/37 N/M FOR FOUDATION.
- 2 - CRUSHING CHARACTERISTIC STRENGTH OF REINFORCED CONCRETE AT 28 DAYS SHALL NOT BE LESS THAN 30/37 N/MM² FOR R. C. WALLS , R. C. COLUMNS , R. C. SLABS & R. C. MEAMS.
- 3 - CRUSHING CHARACTERISTIC STRENGTH OF NON-REINFORCED CONCRETE AT 28 DAYS SHALL NOT BE LESS THAN 16/20 N/MM² .
- 4 - THE CONCRETE USED IN MANUFACTURING THE PAVING BLOCKS SHALL HAVE 28 DAYS CUBE STRENGTH NOT BE LESS THAN 16/20 N/MM² .
- 5 - ORDINARY POTLAND CEMENT SHALL BE USED FOR SUPER-STRUCTURE AND SULFATE RESISTANCE CEMENT SHALL BE USED FOR SUB-STRUCTURE .
- 6 - THE CONTRACTOR SHOULD SUBMIT CONCRETE MIX DESIGNS FOR APPROVAL .

CONCRETE COVERS, LAP LENGTHS, AND STRENGTH OF STEEL BARS AS FOLLOWS:-

A - Ø, INDICATES HIGH YIELD DEFORMED BARS WITH YIELD STRENGTH 350 N/MM² .

B - LAP LENGTH SHALL BE 60 X DIAMETER OF THE BAR UNLESS OTHERWISE MENTIONED .

- C - THE CONCRETE COVER TO THE REINFORCEMENT BARS NOT LESS THAN THE FOLLOWING :
- | | |
|---|--------|
| 1 - MAIN BARS IN TOP OF SLABS | 25 MM. |
| 2 - MAIN BARS IN BOTTOM OF SLABS | 25 MM. |
| 3 - OUTERMOST BARS IN INTERNAL FACES OF COLUMNS , BEAMS AND WALLS | 45 MM. |
| 4 - OUTERMOST BARS IN EXTERNAL FACES OF COLUMNS , BEAMS AND WALLS | 45 MM. |
| 5 - BARS IN THE RAFT | 55 MM. |

GENERAL NOTES

- 1 - SHUTTERING TO BE MADE OF NEW TIMBER AND TO BE CURED WITH WATER BEFORE CASTING.
- 2 - ALL CONCRETE WORK IS TO BE PROPERLY VIBRATED AND THOROUGHLY CURED FOR PERIOD AT LEAST SEVEN DAYS AFTER CONCRETING.
- 3 - SPACERS TO BE HEAVY DUTY PLASTIC.
- 4 - BLOCK WORK AND REINFORCED CONCRETE BELOW PLINTH LEVEL IN CONTACT WITH SOIL HAS TO BE WATER PROOF.
- 5 - CONTRACTOR MUST FAMILIARIZE HIMSELF PROPERLY WITH THE PROJECT ALL TENDER DOCUMENTS , HE SHOULD CHECK DURING TENDERING STAGE, THE CONSTRUCTIBILITY OF THE DRAWING COORDINATING ALL DISCIPLINES SUCH AS STRUCTURAL , ARCHITECTURAL MECH. & ELECT. DRAWING AS WELL AS IDENTIFYING ANY OMISSIONS, AND INFORM CONSULTANT IN WRITING ABOUT ANY DISCREPANCIES FOUND.
- 6 - DURING CONSTRUCTION STAGE, IF ANY DISCREPANCIES ARE DISCOVERED IN THE CONTRACT DOCUMENTS, CONTRACTOR SHOULD NOTIFY CONSULTANT ENGINEERS WITH A REASONABLE LAPSE OF TIME IN ORDER TO APPLY APPROPRIATE CORRECTIVE MEASURES. THE SAME TO THE CORRECTIVE MEASURES ARE PROPOSED BY CONTRACTOR THEY SHOULD BE APPROVED BY CONSULTANT . IF NO CLAIMS OR VARIATION ORDERS SHALL BE ACCEPTED BY THE CLIENT IF RESULTING FROM DISCRIPANCIES AS ALL CLARIFICATIONS AND CHECKINGS SHOULD TAKE PLACE DURING THE TENDERING STAGE.
- 7 - THE STRUCTURAL DESIGN HAS BEEN CARRIED OUT BASED ON BASEMENT AND EIGHT FLOORS ONLY.
- 8 - ALL THE SLAB CANTILEVERS HAVE SPAN MORE THAN 1000MM SHOULD BE CAMBERED UP NOT LESS THAN 15 MM.

9 - THE PERMANENT ACTION IS CONSIDERED AS THE LIGHT WEIGHT FINISHING MATERIAL HAS BEEN CONSIDERED IN THE STRUCTURAL DESIGN CALCULATION.

THE PARTITION WALLS WITH PLASTER (SAND-LIME BRICKS (PUMICE BRICKS)) = 1.10 KN/M².

THE FLOORING MATERIAL = 0.50 KN/M².

10 - THE VARIABLE ACTION IS CONSIDERED BASED ON EURO CODE 1.

CATEGORY A - ALL FLOORS EXCEPT GROUND FLOOR = 2.50 KN/M².

CATEGORY C3 - GROUND FLOOR AND STAIRS = 4.00 KN/M².

CATEGORY A – ROOF FLOOR = 1.50 KN/MS.

11 - THE WIND ACTION IS CONSIDERED BASED ON EURO CODE 1 : PART 1-4 .

TERRAIN CATEGORY, I.

BASIC WIND SPEED = 24 M/SEC.

12 - SEISMIC ACTION.

BENGHAZI - LOW SEISMICITY ZONE.

NON - ENERGY DISSIPATION.

DCL - Ductility class low, ground design acceleration = 0.10 g.

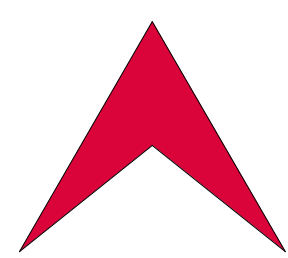
COLUMNS , BEAMS AND WALLS NOTES

1 - VERTICAL REINFORCEMENT OF COLUMNS AND WALLS SHOULD BE DOWELED FROM THE RAFT. LENGTHS OF THESE DOWELS SHOULD NOT BE LESS THAN 2000 MM WITH 1000 MM AT LEAST OF ITS LENTH PROJECTING ABOVE THE Raft TOP SURFACE, UNLESS OTHER WISE MENTIONED.

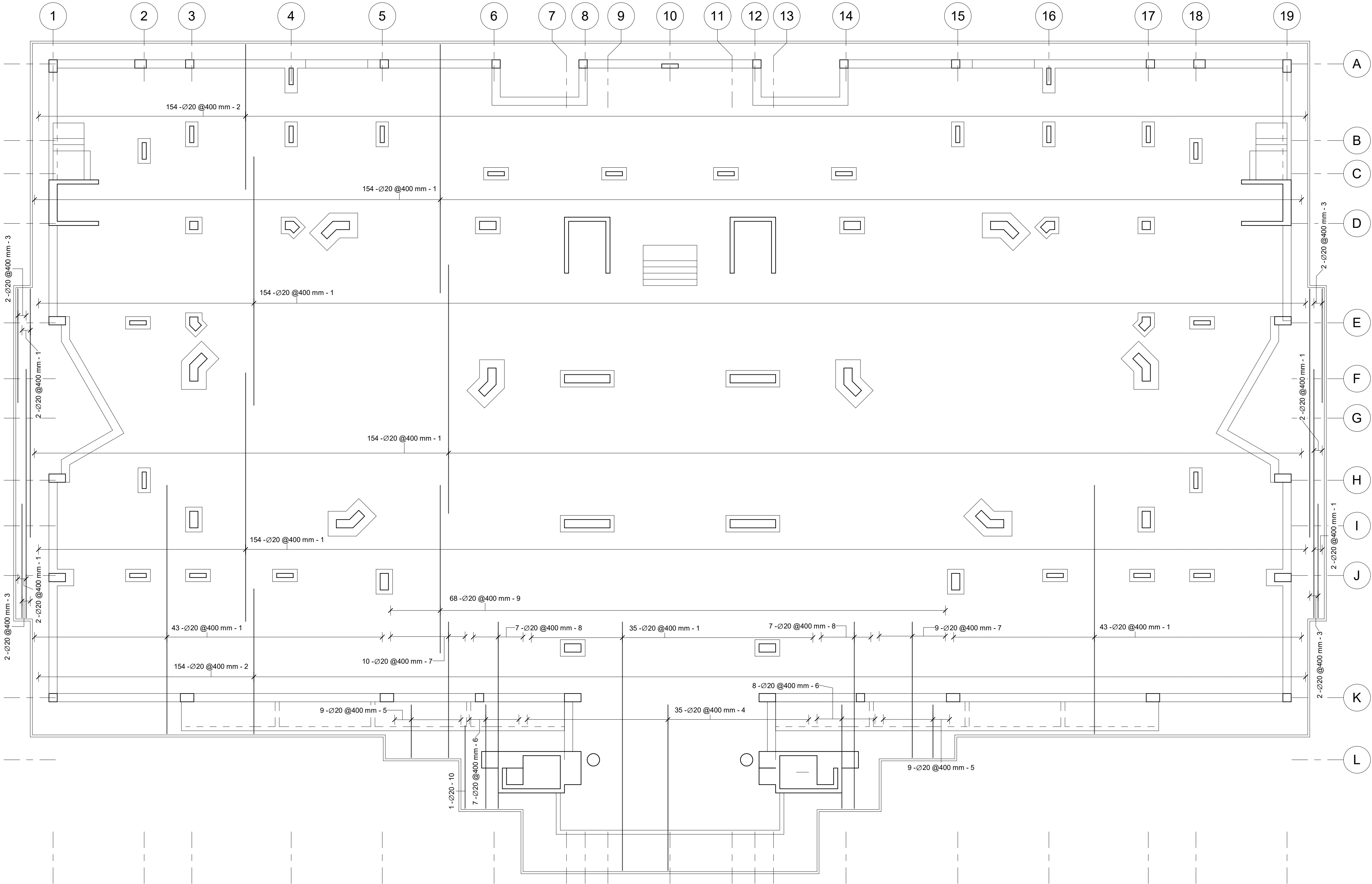
2 - TIES SHALL BE OF HIGH YIELD STEEL IN NUMBERS AND SHAPES AS SHOWN ON DRAWINGS.

FOUNDATION NOTES

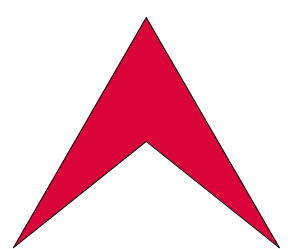
- 1 - RAFT IS DESIGNED FOR A BEARING CAPACITY OF 120 KN/M².
- 2 - SULFATE RESISTANCE CEMENT SHALL BE USED WHEREVER CONCRETE IN CONTACT WITH SOIL I.E. UP TO PLINTH LEVEL.
- 3 - FOR ALL SUBSTRUCTURE WORKS, CONTRACTOR SHALL PREPARE A SUITABLE CONCRETE MIX DESIGN AS PER THE SOIL REPORT REQUIREMENTS. FOR AGGRESSIVE SOIL CONDITIONS, CONTRACTOR SHALL SUBMIT A SUITABLE MIX DESIGN. CONTRACTOR SHALL PROTECT ALL SUBSTRUCTURE ELEMENTS AGAINST CHEMICAL ATTACK.

 L Libyan C Center E For Engineering C Consultancy Certified From Autodesk	AL-baraka البركة Jamal Abdalnasser st. شارع جمال عبد الناصر Noaman Tower برج النعمان Benghazi-Libya بنغازى-ليبيا LCEC@mail.com Mobile +218 92 512 3567 Mobile +218 91 857 1229	 شركة اهل الثقة للمقاولات العامة ليبيا - بنغازى الفويحات الغربية شارع العامرية	Rev.	AMENDMENT	DATE	Court of Benghazi North Benghazi Structural General Notes		ST-RT-01-00	
						SCALE:	1 : 1	DATE:	February 2021
						DESIGNED:	Refaat Elburki		
						DRAWN:	Awad Edrees		

Raft Foundation Main Bottom Reinforcement (Major Direction) Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	745	12000 mm	8940 m	12000 mm	22047
2	20 mm	308	7000 mm	2156 m	7000 mm	5317
3	20 mm	8	5500 mm	44 m	5500 mm	109
4	20 mm	35	8000 mm	280 m	8000 mm	691
5	20 mm	18	2550 mm	46 m	2550 mm	113
6	20 mm	15	5000 mm	75 m	5000 mm	185
7	20 mm	19	6550 mm	124 m	6550 mm	307
8	20 mm	14	9000 mm	126 m	9000 mm	311
9	20 mm	68	8100 mm	551 m	8100 mm	1358
10	20 mm	1	4000 mm	4 m	4000 mm	10
		1231		12346 m		30447



1 Raft Foundation Main Bottom Reinforcement (Major Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية



Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi

Raft Foundation Main Bottom Reinforcement (Major Direction)

ST-RT-02-00

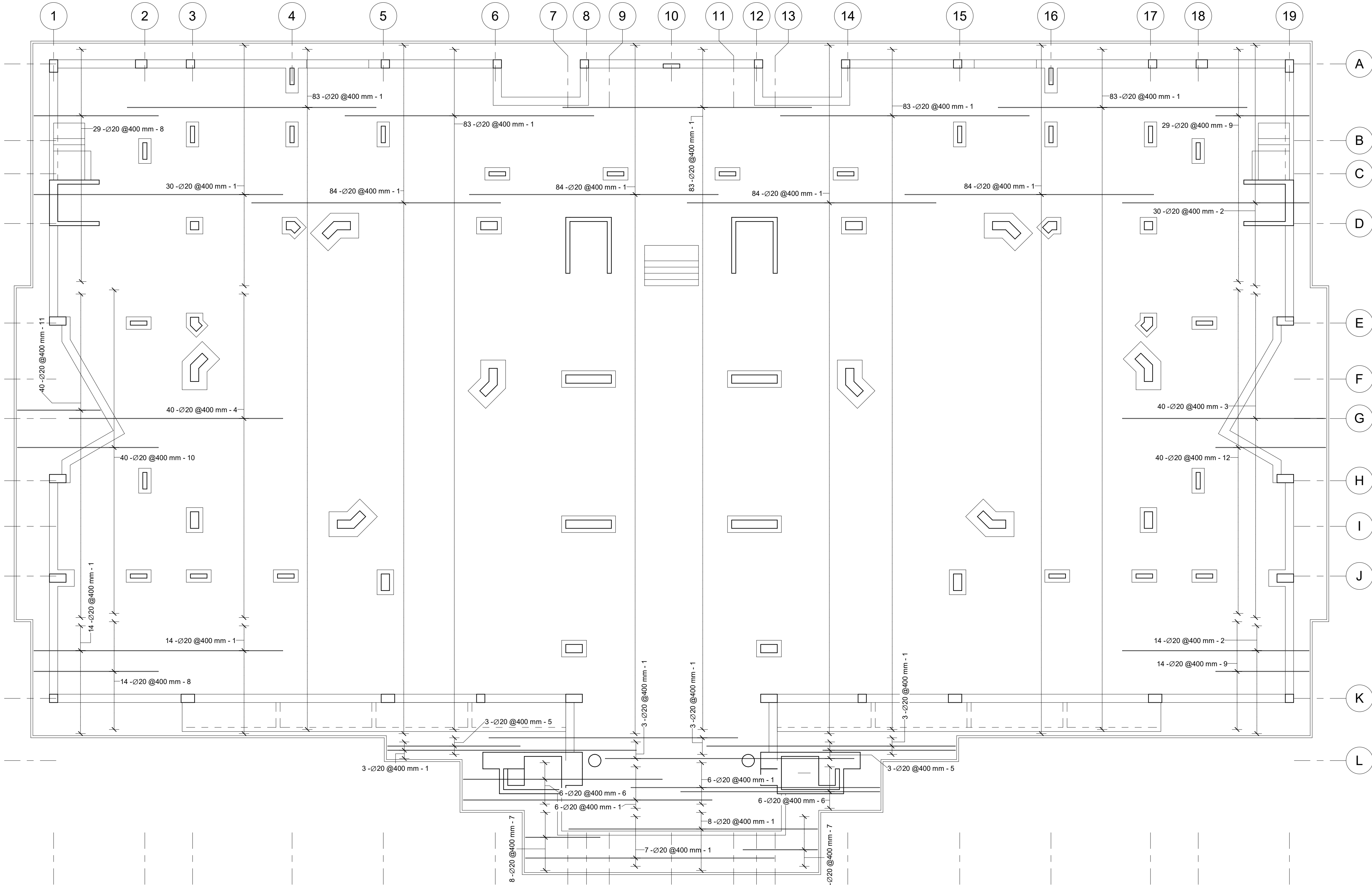
SCALE: 1 : 100

DATE: February 2021

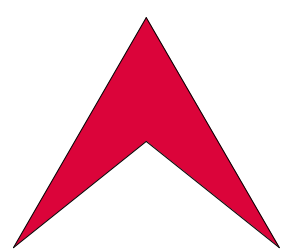
DESIGNED: Refaat Elburki

DRAWN: Awad Edrees

Raft Foundation Main Bottom Reinforcement (Minor Direction) Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	834	12000 mm	10008 m	12000 mm	24681	
2	20 mm	44	9000 mm	396 m	9000 mm	977	
3	20 mm	40	9800 mm	392 m	9800 mm	967	
4	20 mm	40	10300 mm	412 m	10300 mm	1016	
5	20 mm	6	6400 mm	38 m	6400 mm	95	
6	20 mm	12	9600 mm	115 m	9600 mm	284	
7	20 mm	15	3600 mm	54 m	3600 mm	133	
8	20 mm	43	6000 mm	258 m	6000 mm	636	
9	20 mm	43	4500 mm	194 m	4500 mm	477	
10	20 mm	40	6800 mm	272 m	6800 mm	671	
11	20 mm	40	4000 mm	160 m	4000 mm	395	
12	20 mm	40	5300 mm	212 m	5300 mm	523	
		1197		12511 m		30854	



1 Raft Foundation Main Bottom Reinforcement (Minor Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

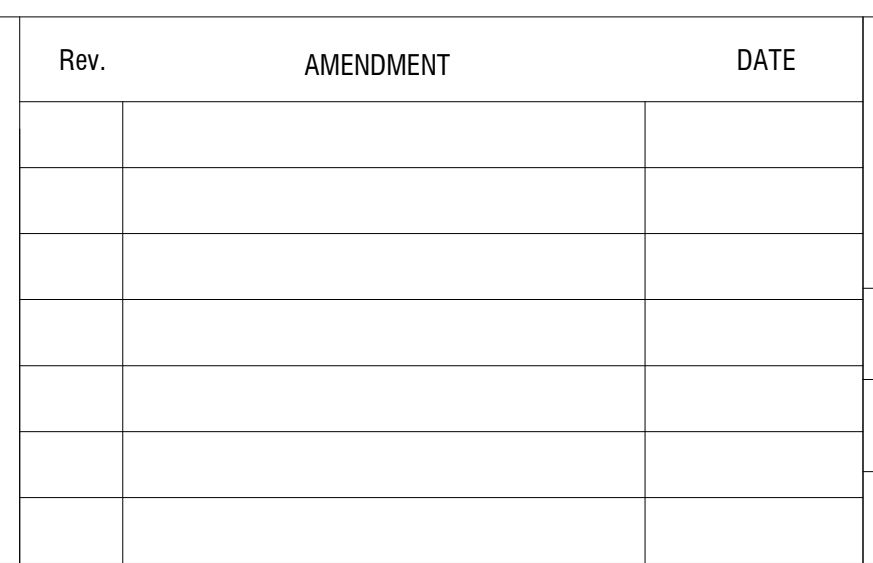


Rev.	AMENDMENT	DATE

Court of Benghazi North		
Benghazi		
Raft Foundation Main Bottom Reinforcement (Minor Direction)		ST-RT-03-00
SCALE:	1 : 100	DATE: February 2021
DESIGNED:	Refaat Elburki	
DRAWN:	Awad Edrees	

Structural drawing of a floor slab showing reinforcement details. The drawing includes a grid system with columns 1-19 and rows A-L. Reinforcement bars are labeled with quantities, diameters, and spacing, such as 154 - Ø20 @400 mm - 2 and 43 - Ø20 @400 mm - 1. The drawing also shows various structural elements like walls, columns, and beams.

	L	Libyan	AL-baraka	البركة
	C	Center	Jamal Abdalnasser st.	شارع جمال عبد الناصر
	E	For Engineering	Noaman Tower	برج النعمان
	C	Consultancy	Benghazi-Libya	بنغازي-ليبيا
		Certified From Autodesk	LCEC@mail.com	
		Mobile +218 92 512 3567		
		Mobile +218 91 857 1229		



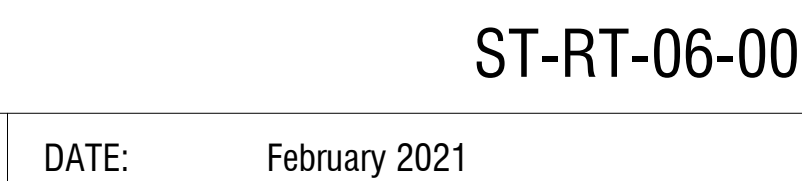
Court of Benghazi North		
Benghazi		
Raft Foundation Main Top Reinforcement (Major Direction)		ST-RT-04-00
SCALE:	1 : 100	DATE: February 2021
DESIGNED:	Refaat Elburki	
DRAWN:	Awad Edrees	

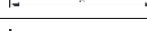
[illegible]

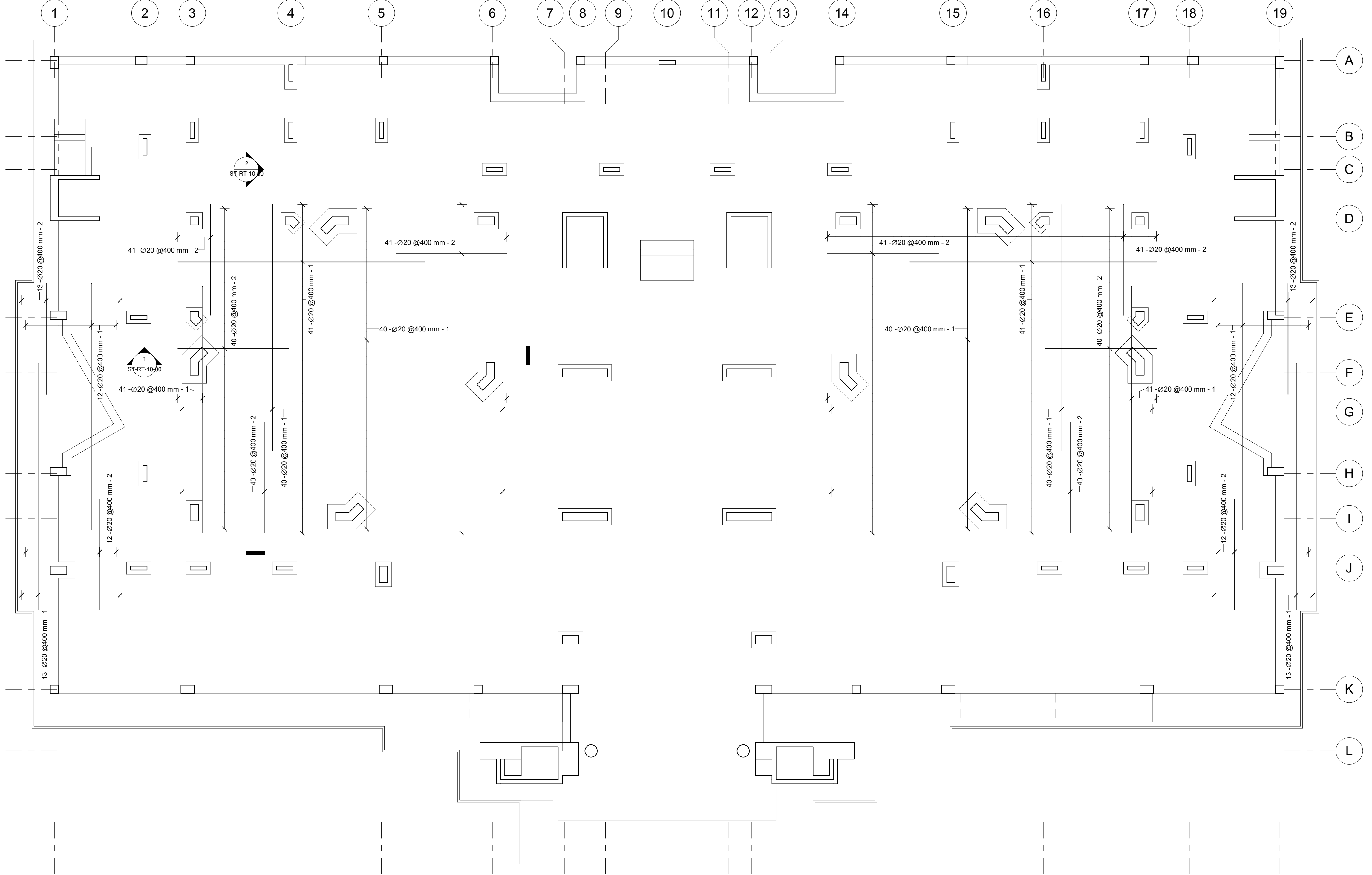
 L Libyan C Center E For Engineering C Consultancy Certified From Autodesk	AL-baraka Jamal Abdalnasser st. Noaman Tower Benghazi-Libya LCEC@mail.com Mobile +218 92 512 3567 Mobile +218 91 857 1229	البركة شارع جمال عبد الناصر برج النعمان بنغازي-ليبيا	 شركة اهل الثقة للمقاولات العامة ليبيا - بنغازي الفويحات الغربية شارع العامرية	<table border="1"> <thead> <tr> <th>Rev.</th> <th>AMENDMENT</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Rev.	AMENDMENT	DATE																			Court of Benghazi North Benghazi Raft Foundation Main Top Reinforcement (Minor Direction) ST-RT-05-00 <table border="1"> <tr> <td>SCALE: 1 : 100</td> <td>DATE: February 2021</td> </tr> <tr> <td>DESIGNED: Refaat Elburki</td> <td rowspan="2"></td> </tr> <tr> <td>DRAWN: Awad Edrees</td> </tr> </table>	SCALE: 1 : 100	DATE: February 2021	DESIGNED: Refaat Elburki		DRAWN: Awad Edrees
	Rev.	AMENDMENT	DATE																												
SCALE: 1 : 100	DATE: February 2021																														
DESIGNED: Refaat Elburki																															
DRAWN: Awad Edrees																															

[illegible]

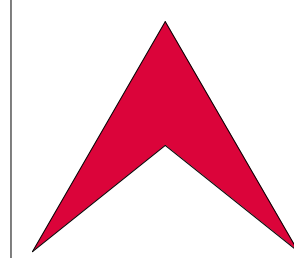
1



Raft Foundation Additional Top Reinforcement							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	374	12000 mm	4488 m	12000 mm	11068	
2	20 mm	374	5400 mm	2020 m	5400 mm	4981	
		748		6508 m		16049	



1 Raft Foundation Additional Top Reinforcement
1 : 100



L Libyan

C Center

E For Engineering

C Consultancy

Certified From Autodesk

البركة

شارع جمال عبد الناصر

Noaman Tower

Benghazi-Libya

LCEC@mail.com

Mobile +218 92 512 3567

Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة

ليبيا - بنغازي

الفويحات الغربية

شارع العامرية



Rev.	AMENDMENT	DATE

Court of Benghazi North

Benghazi

Raft Foundation Additional Top Reinforcement

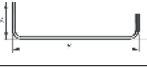
ST-RT-07-00

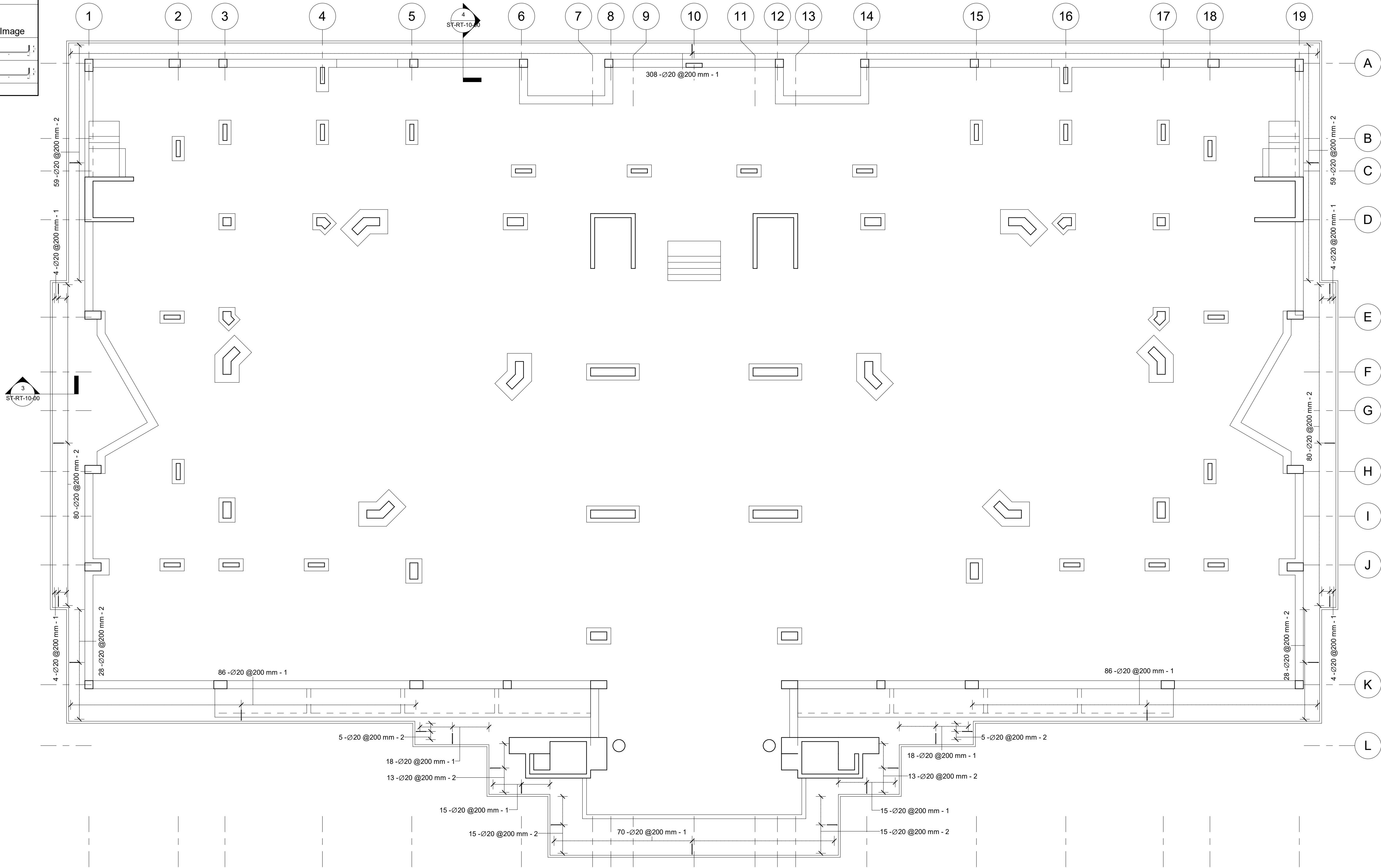
SCALE: 1 : 100

DESIGNED: Refaat Elburki

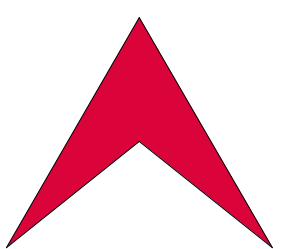
DRAWN: Awad Edrees

DATE: February 2021

Raft Foundation Side Reinforcement Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Image
1	20 mm	632	1480 mm	935 m	500 mm	590 mm	500 mm	2307	
2	20 mm	400	1440 mm	576 m	500 mm	550 mm	500 mm	1421	
		1032	1511 m		3727				



1 Raft Foundation Side Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية



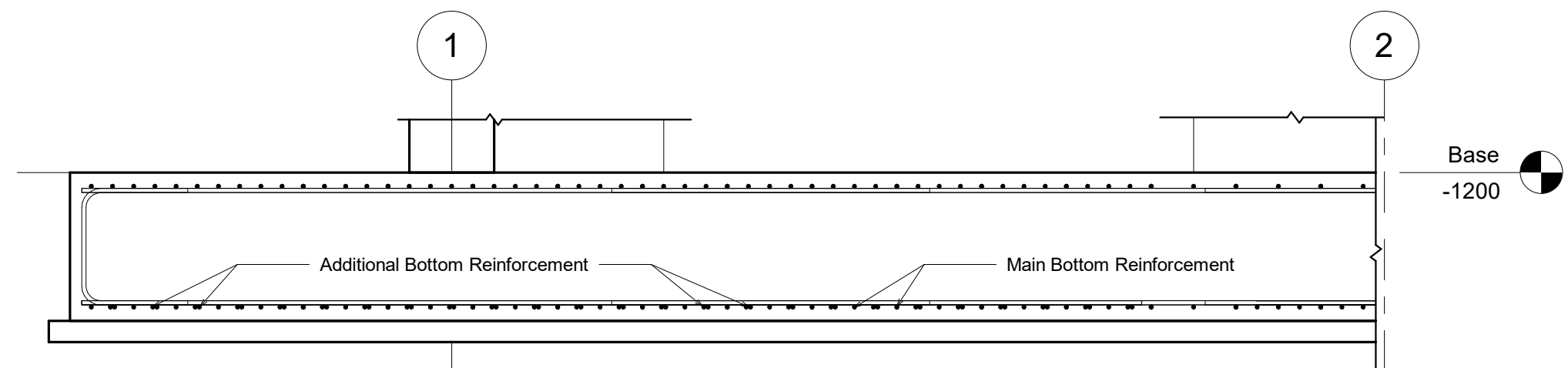
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Raft Foundation Side Reinforcement

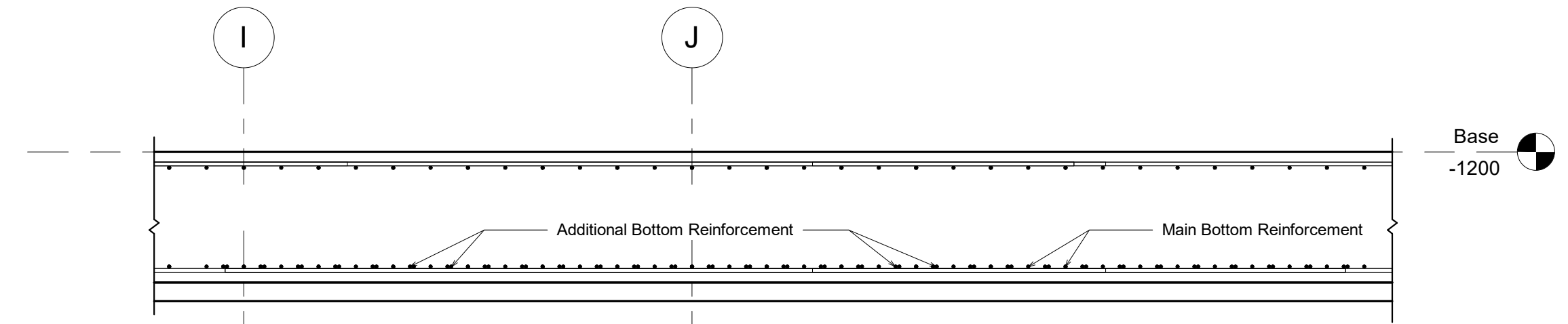
ST-RT-08-00

SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

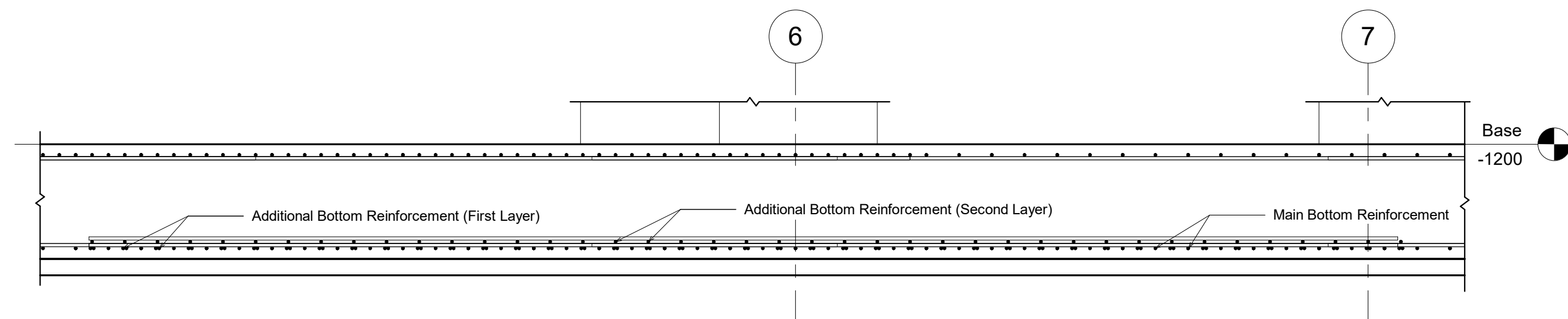
DATE: February 2021



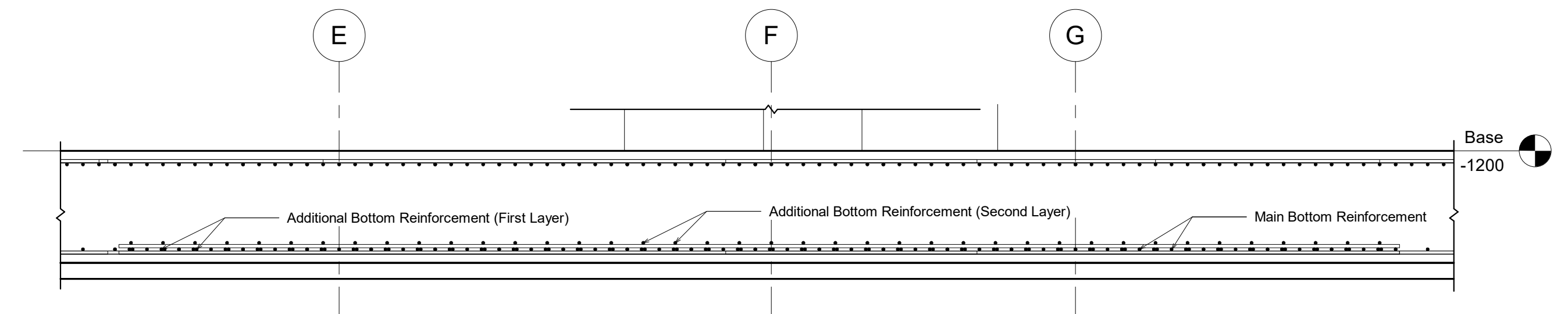
1 Additional Bottom Reinforcement (Section 1)
1 : 25



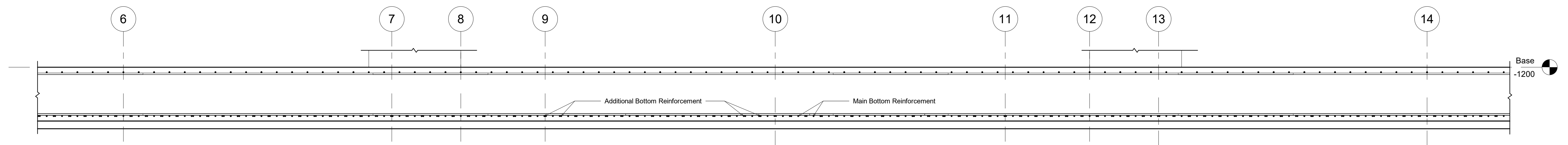
2 Additional Bottom Reinforcement (Section 2)
1 : 25



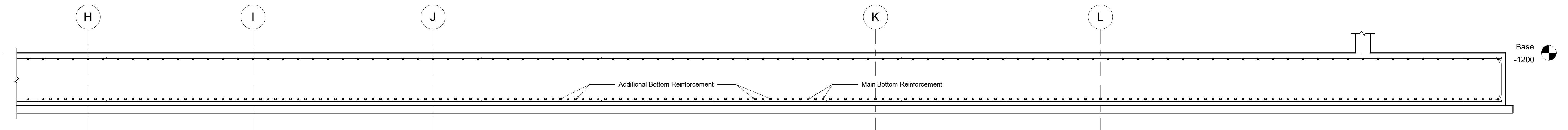
3 Additional Bottom Reinforcement (Section 3)
1 : 25



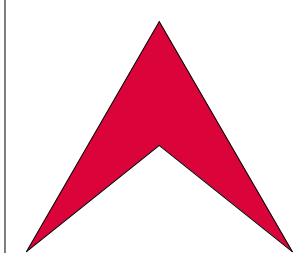
4 Additional Bottom Reinforcement (Section 4)
1 : 25



5 Additional Bottom Reinforcement (Section 5)
1 : 25



6 Additional Bottom Reinforcement (Section 6)
1 : 25



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi

Raft Foundation Reinforcement Details (1)

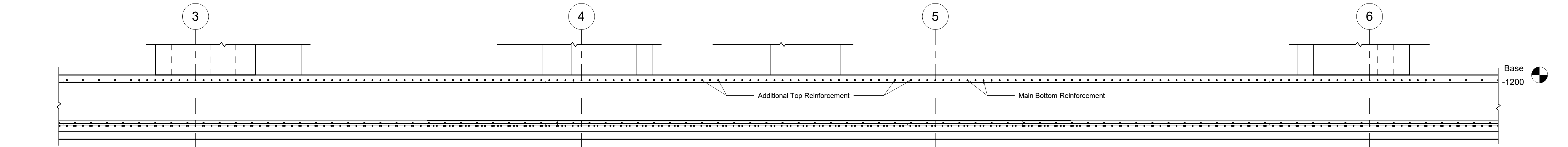
ST-RT-09-00

SCALE: 1 : 25

DATE: February 2021

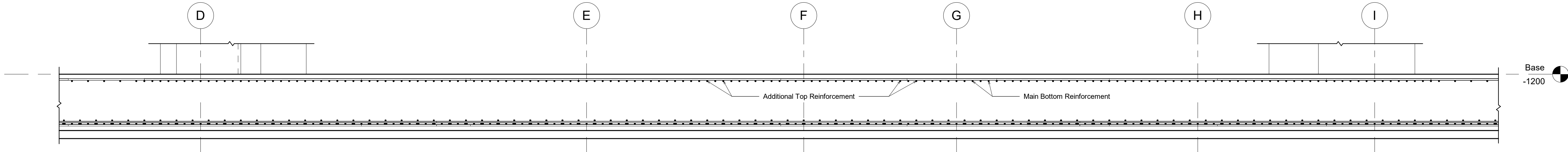
DESIGNED: Refaat Elburki

DRAWN: Awad Edrees



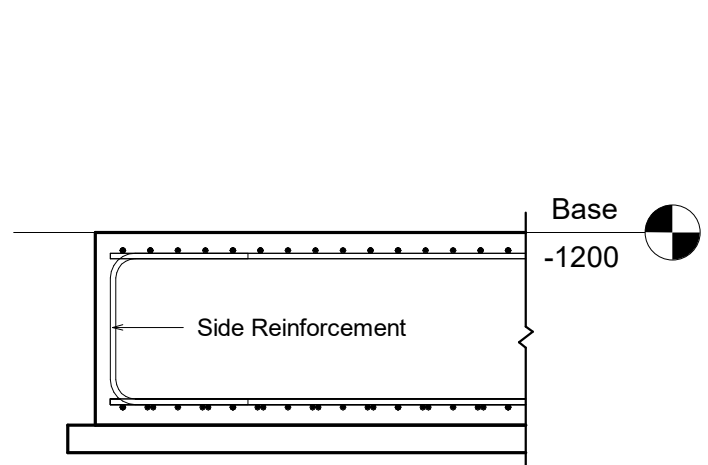
1 Additional Top Reinforcement (Section 1)

1 : 25



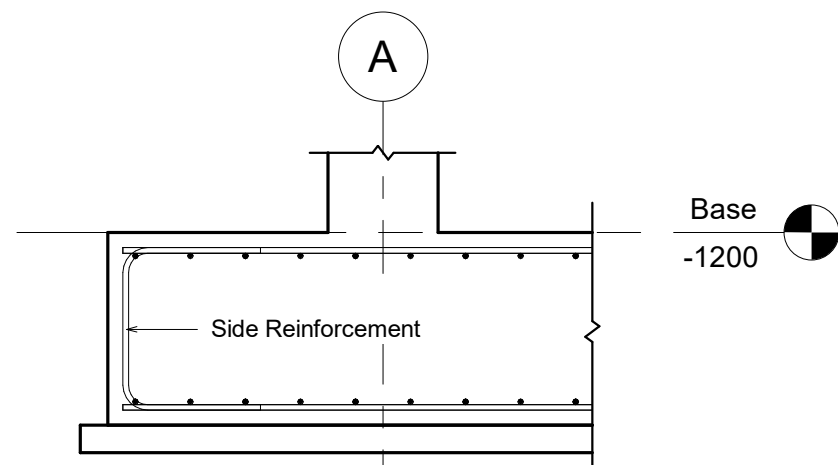
2 Additional Top Reinforcement (Section 2)

1 : 25



3 Side Reinforcement (Section 1)

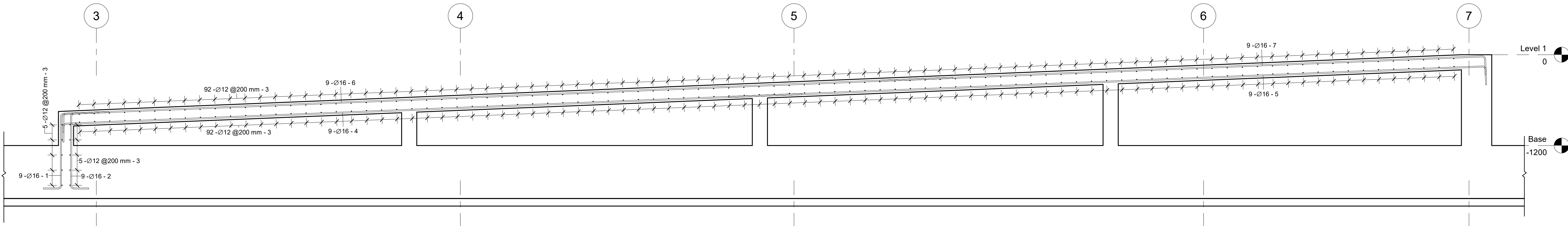
1 : 25



4 Side Reinforcement (Section 2)

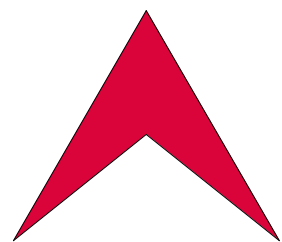
1 : 25

Ramp Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Ramps	Image
1	16 mm	9	1680 mm	15 m	500 mm	1000 mm	240 mm	500 mm	24	48	
2	16 mm	9	1680 mm	15 m	500 mm	1010 mm	240 mm	500 mm	24	48	
3	12 mm	194	1150 mm	223 m	1150 mm	0 mm	0 mm	0 mm	198	396	
4	16 mm	9	9970 mm	90 m	250 mm	9750 mm	0 mm	250 mm	142	283	
5	16 mm	9	10220 mm	92 m	250 mm	10000 mm	0 mm	0 mm	145	290	
6	16 mm	9	11970 mm	108 m	250 mm	11750 mm	0 mm	250 mm	170	340	
7	16 mm	9	8220 mm	74 m	250 mm	8000 mm	0 mm	0 mm	117	234	
		248	617 m						819	1639	



5 Ramp

1 : 25



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Raft Foundation Reinforcement Details (2)

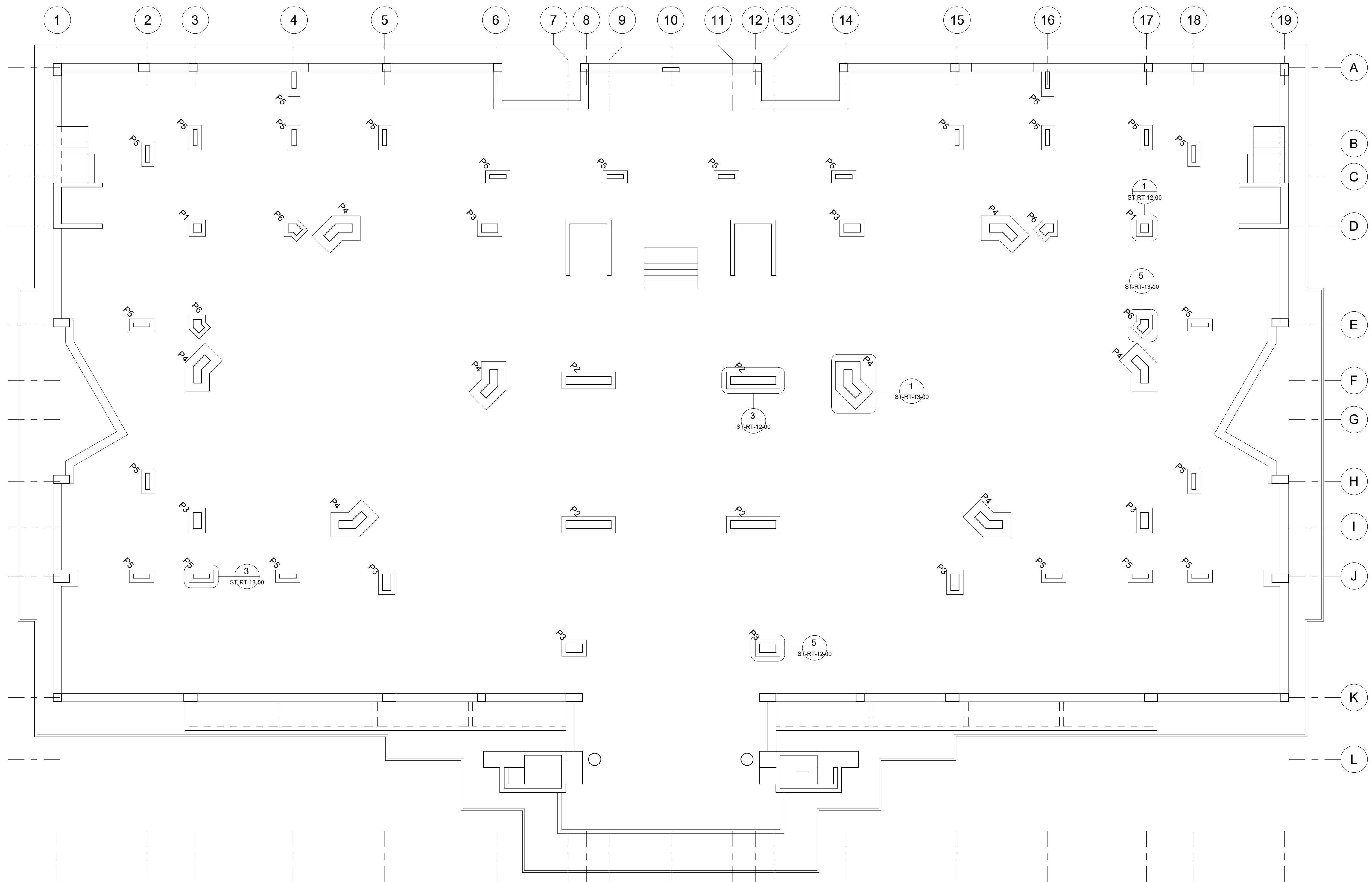
SCALE: 1 : 25

DESIGNED: Refaat Elburki

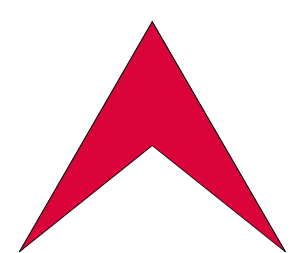
DRAWN: Awad Edrees

DATE: February 2021

ST-RT-10-00



1 Raft Foundation Piers Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka
Jamal Abdunnasser st.
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

البركة

شارع جمال عبد الناصر

برج النعمان

بنغازي-ليبيا

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

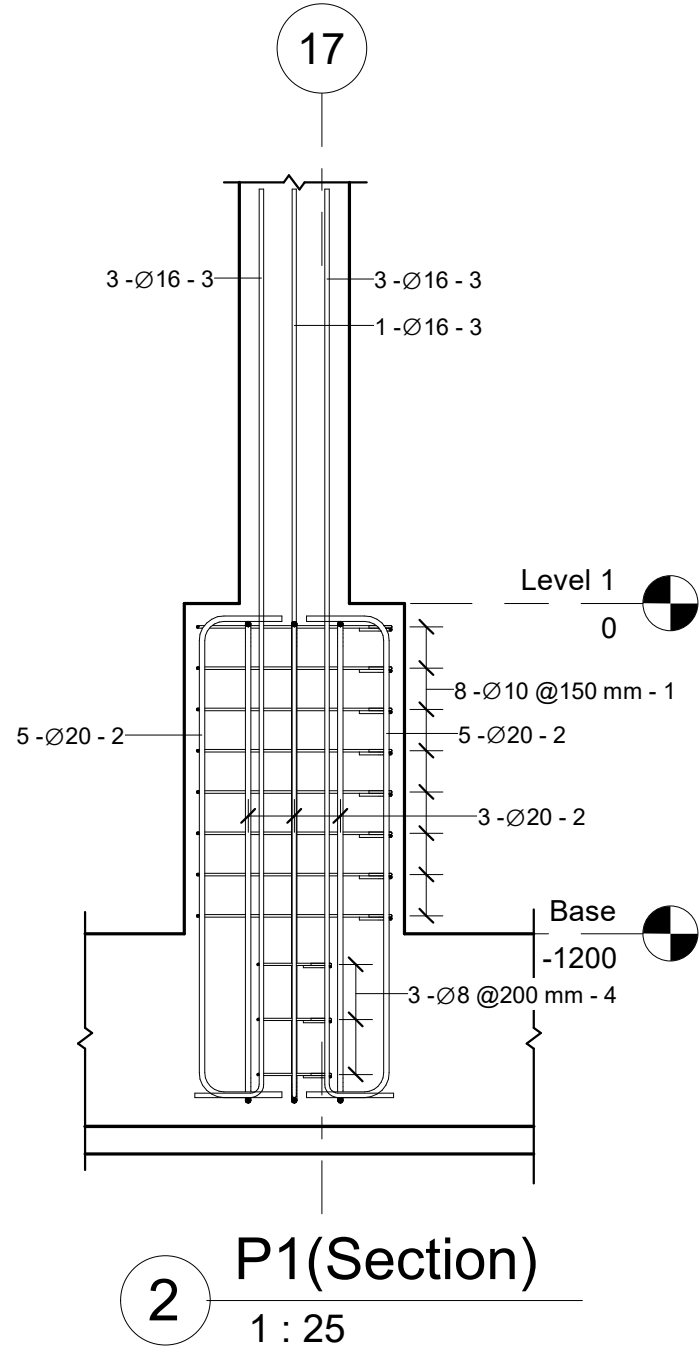
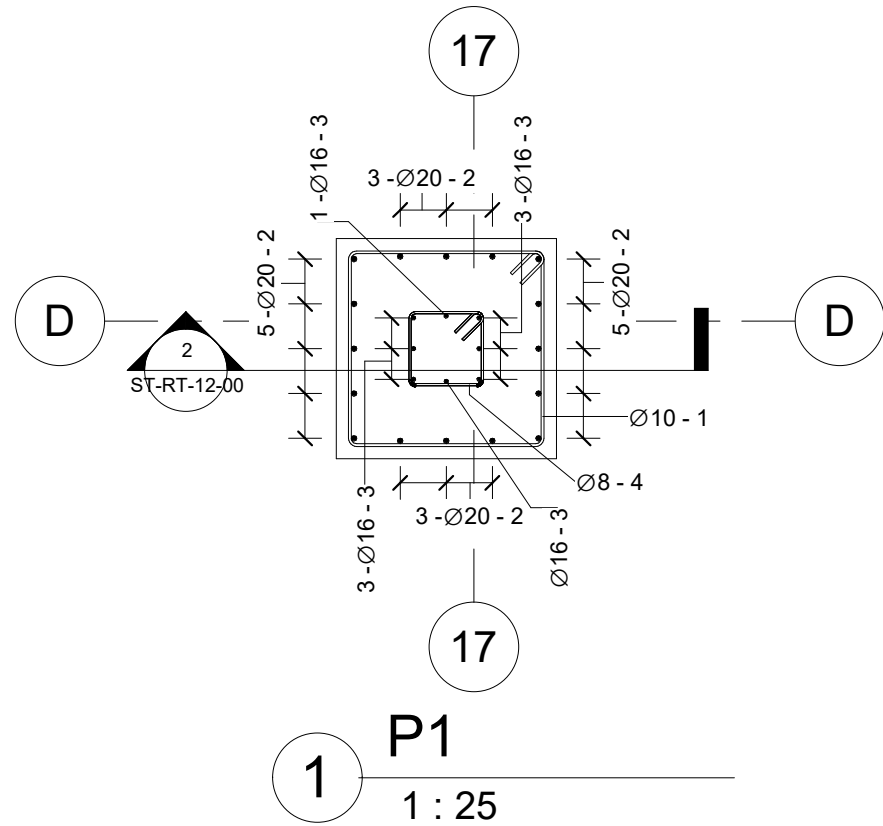


Rev.	AMENDMENT	DATE

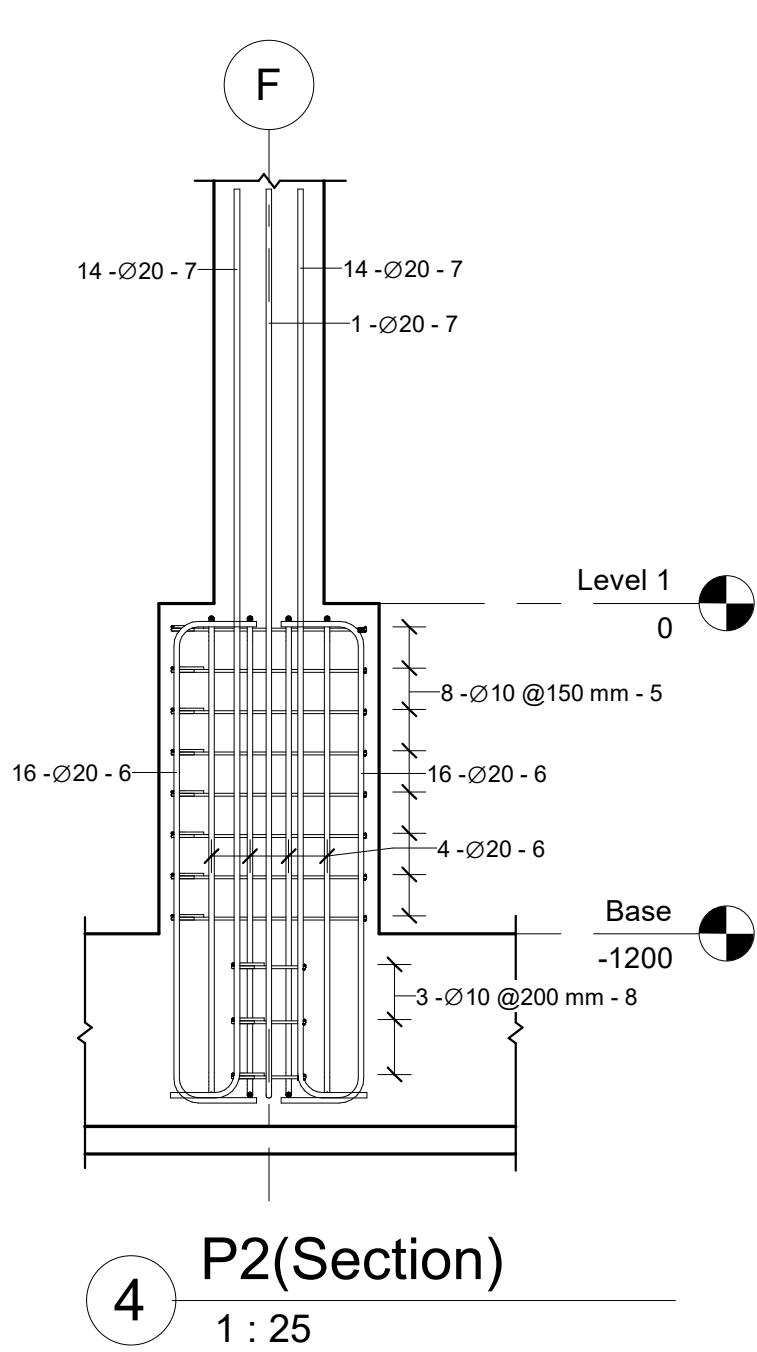
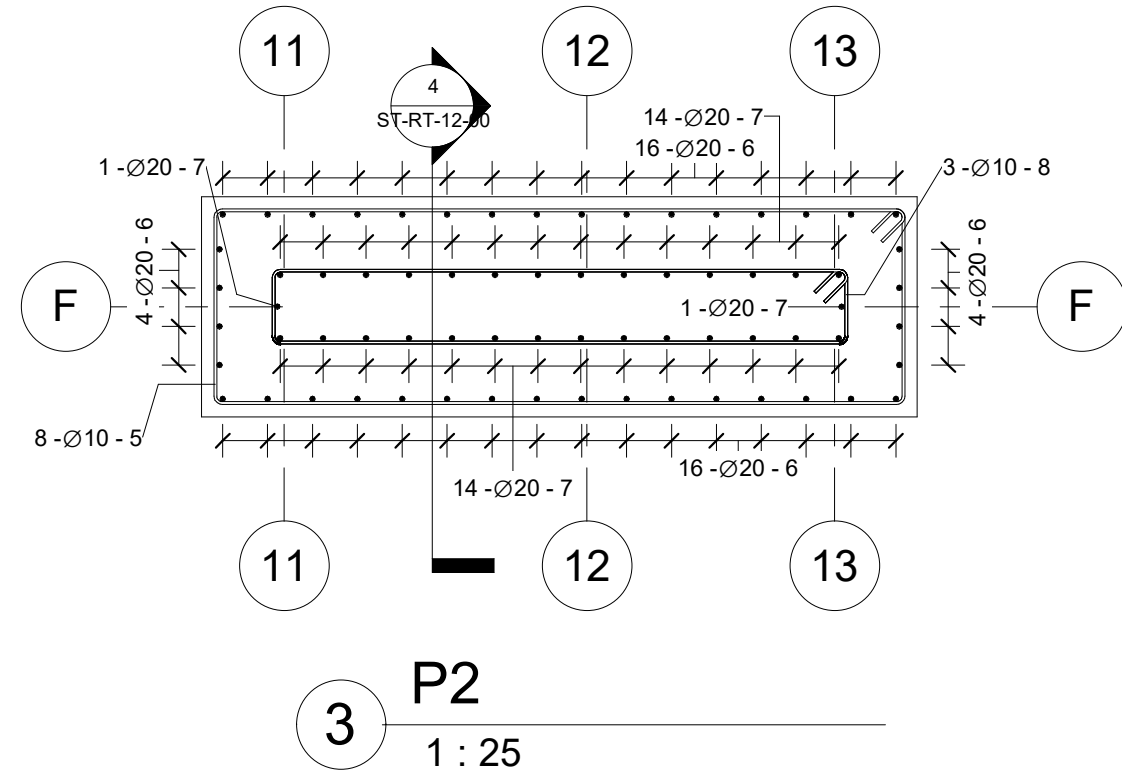
Court of Benghazi North
Benghazi
Raft Foundation Piers Layout

ST-RT-11-00

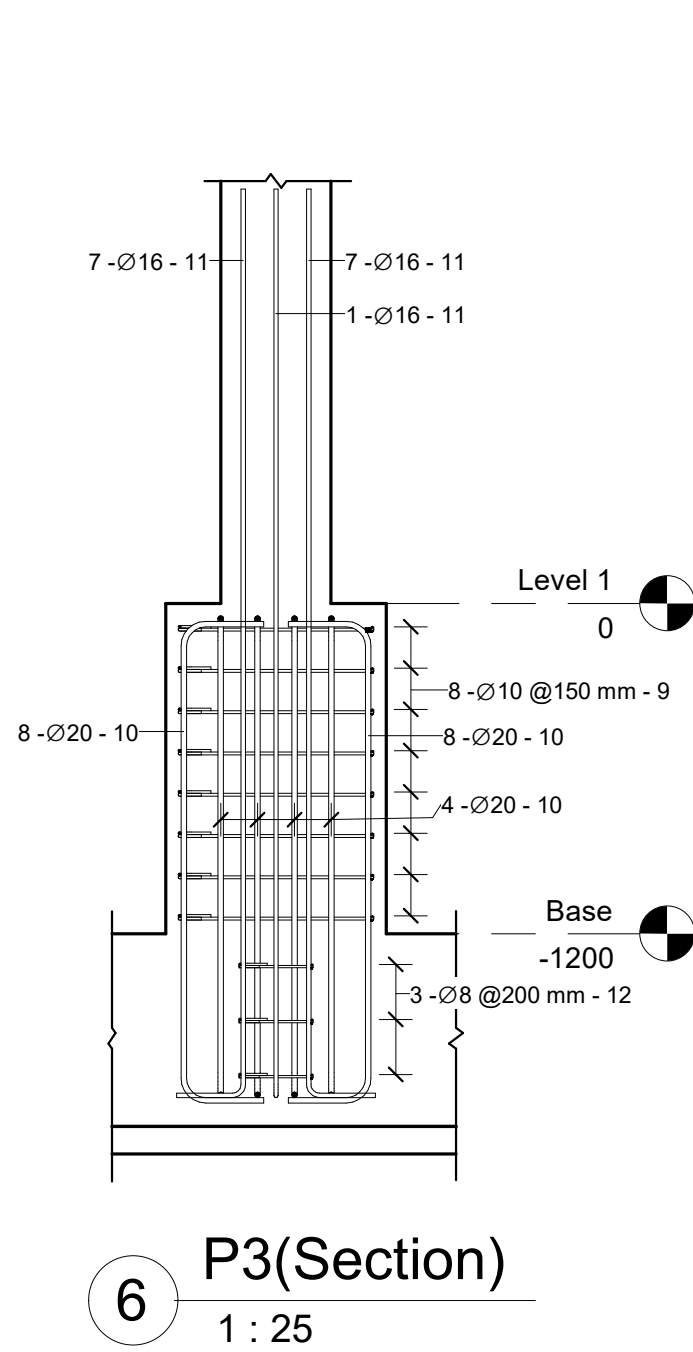
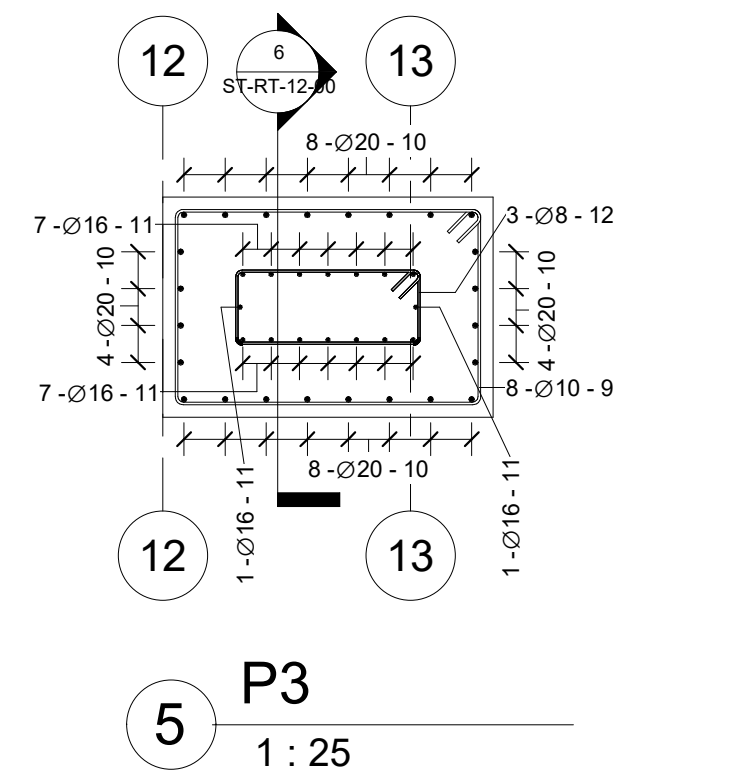
SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



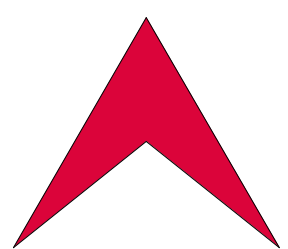
Pier P1 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Piers	Image
1	10 mm	8	3040 mm	24 m	710 mm	710 mm	130 mm	130 mm	15	30	
2	20 mm	16	2240 mm	36 m	300 mm	1750 mm	300 mm	0 mm	88	177	
3	16 mm	8	3520 mm	28 m	250 mm	3300 mm	0 mm	0 mm	44	89	
4	8 mm	3	1260 mm	4 m	270 mm	270 mm	110 mm	110 mm	1	3	
		35	92 m						149	299	



Pier P2 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 4 Piers	Image
5	10 mm	8	6640 mm	53 m	2510 mm	710 mm	130 mm	130 mm	33	131	
6	20 mm	40	2240 mm	90 m	300 mm	1750 mm	300 mm	0 mm	221	884	
7	20 mm	30	3500 mm	105 m	250 mm	3300 mm	0 mm	0 mm	259	1036	
8	10 mm	3	4920 mm	15 m	2090 mm	270 mm	130 mm	130 mm	9	36	
		81	262 m						522	2087	



Pier P3 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 8 Piers	Image
9	10 mm	24	3840 mm	92 m	1110 mm	710 mm	130 mm	130 mm	57	455	
10	20 mm	72	2240 mm	161 m	300 mm	1750 mm	300 mm	0 mm	398	3182	
11	16 mm	16	3520 mm	56 m	250 mm	3300 mm	0 mm	0 mm	89	711	
12	8 mm	3	2060 mm	6 m	670 mm	270 mm	110 mm	110 mm	2	20	
		115	316 m						546	4367	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka البركة
Jamal Abdalnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاث الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Piers P1 to P3 Reinforcement

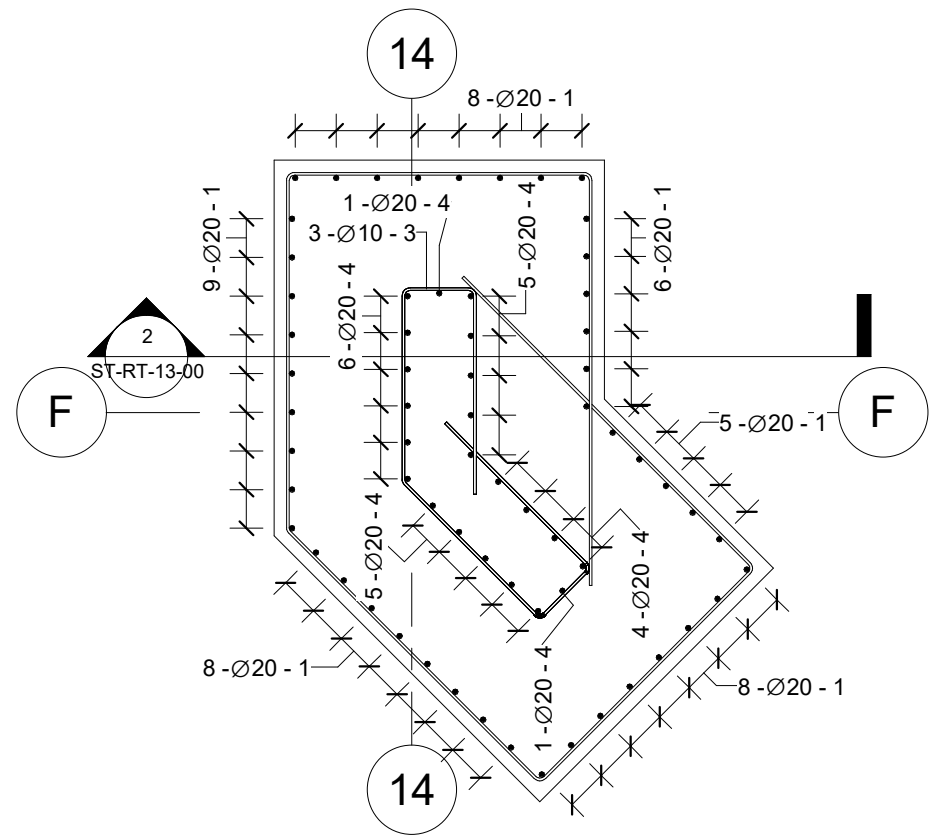
SCALE: 1 : 25

DESIGNED: Refaat Elburki

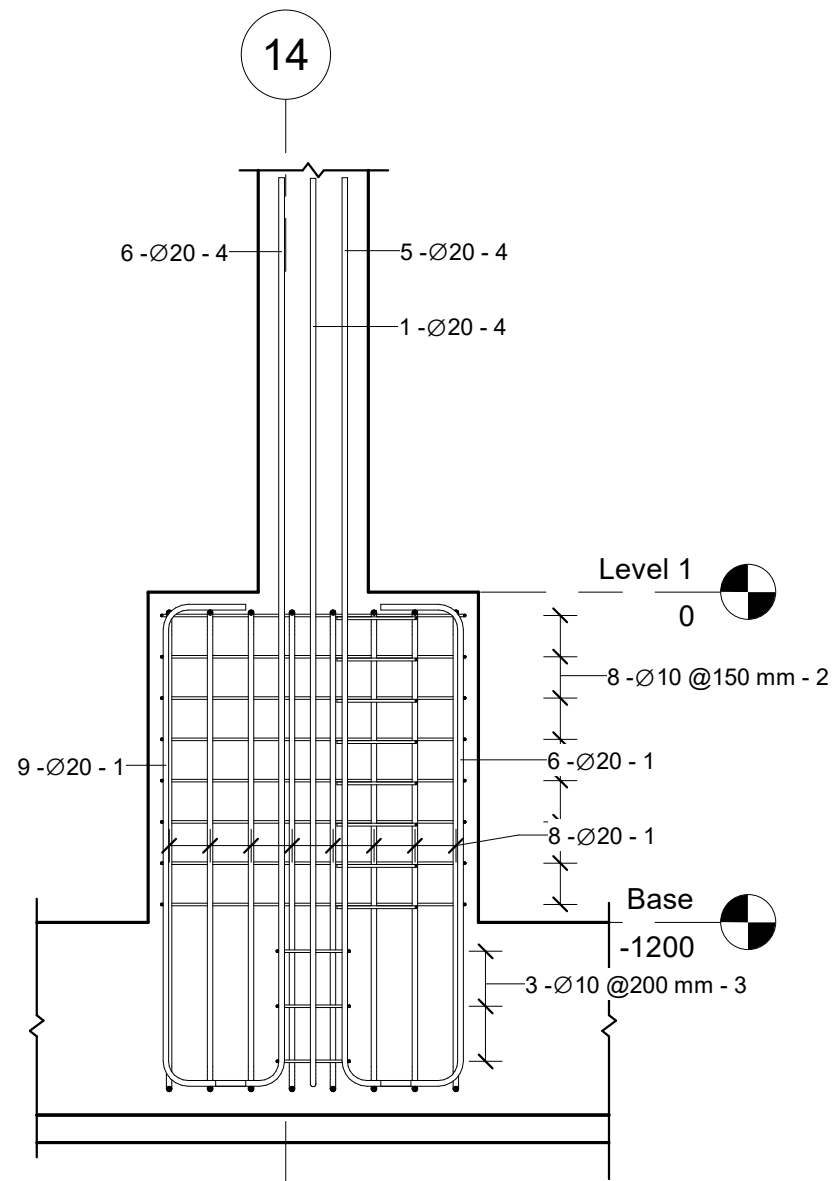
DRAWN: Awad Edrees

DATE: February 2021

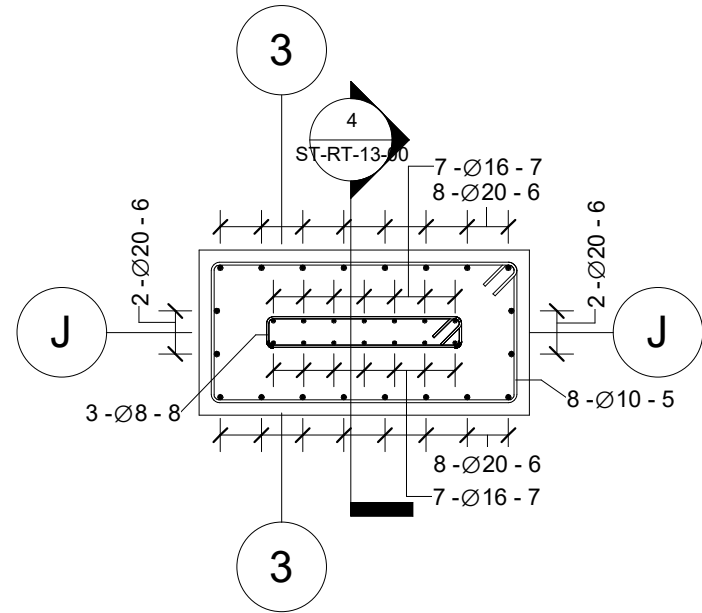
ST-RT-12-00



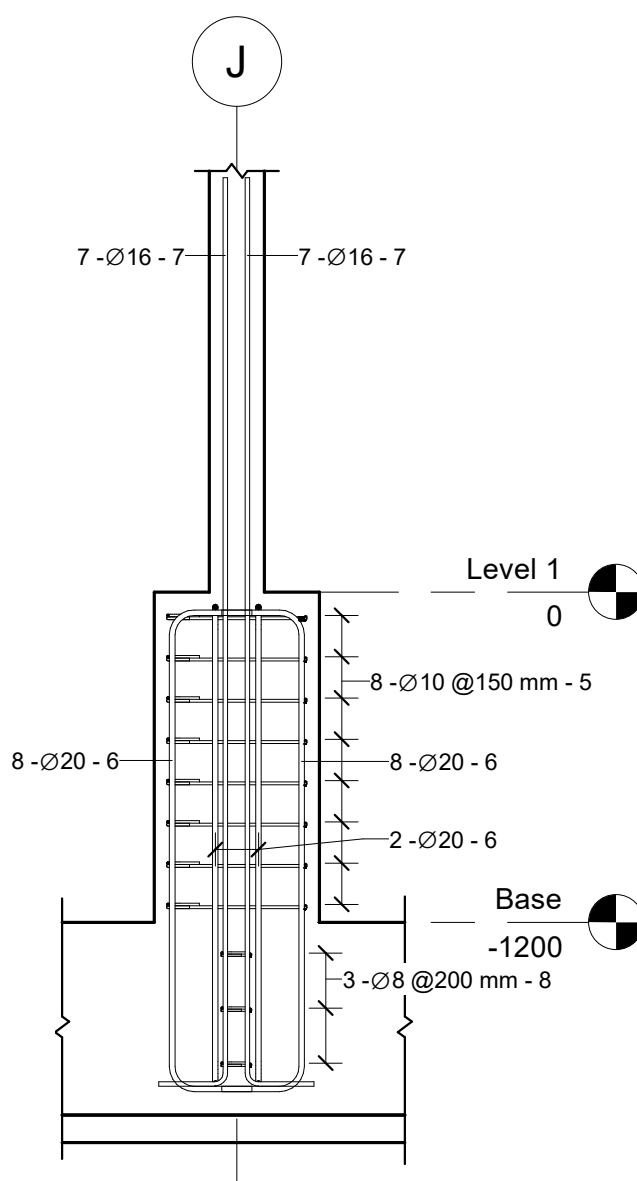
1 P4
1 : 25



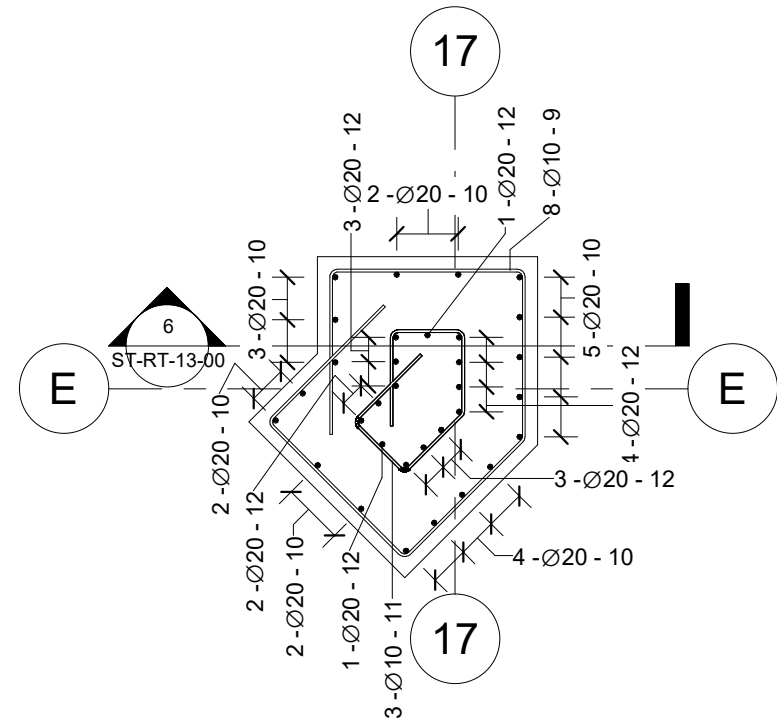
2 P4(Section)
1 : 25



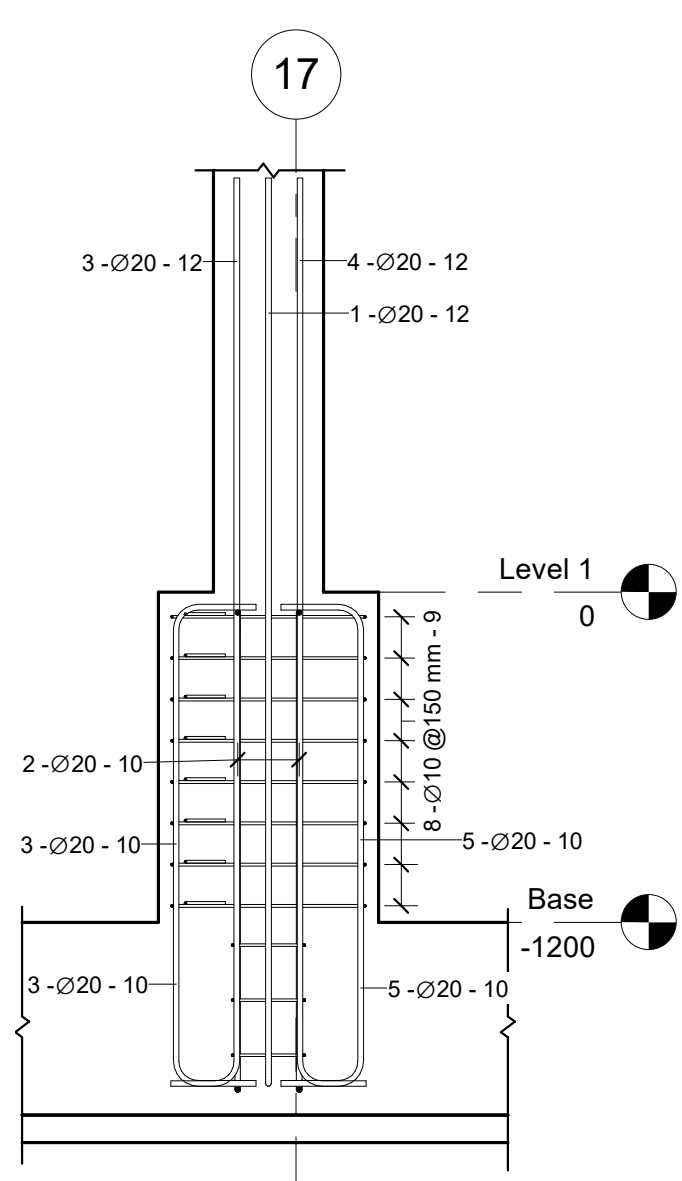
3 P5
1 : 25



4 P5(Section)
1 : 25

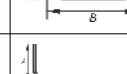


5 P6
1 : 25

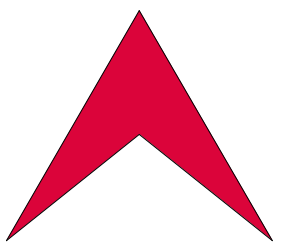


6 P6(Section)
1 : 25

Pier P4 Rebar Schedule													
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	G	H	Weight (Kg)	Weight of 8 Piers	Image
1	20 mm	44	2240 mm	99 m	300 mm	1750 mm	300 mm	0 mm	0 mm	0 mm	243	1945	
2	10 mm	8	7740 mm	62 m	1500 mm	1110 mm	1300 mm	1300 mm	1110 mm	1500 mm	38	305	
3	10 mm	3	3370 mm	10 m	750 mm	270 mm	710 mm	710 mm	270 mm	750 mm	6	50	
4	20 mm	22	3500 mm	77 m	250 mm	3300 mm	0 mm	0 mm	0 mm	0 mm	190	1519	
		77	248 m								477	3819	

Pier P5 Rebar Schedule												
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 24 Piers	Image	
5	10 mm	8	3440 mm	28 m	1110 mm	510 mm	130 mm	130 mm	17	407		
6	20 mm	20	2240 mm	45 m	300 mm	1750 mm	300 mm	0 mm	110	2652		
7	16 mm	14	3520 mm	49 m	250 mm	3300 mm	0 mm	0 mm	78	1867		
8	8 mm	3	1820 mm	5 m	710 mm	110 mm	110 mm	110 mm	2	52		
		45	127 m						207	4977		

Pier P6 Rebar Schedule													
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	G	H	Weight (Kg)	Weight of 4 Piers	Image
9	10 mm	8	3770 mm	30 m	600 mm	710 mm	620 mm	620 mm	710 mm	600 mm	19	74	
10	20 mm	18	2240 mm	40 m	300 mm	1750 mm	300 mm	0 mm	0 mm	0 mm	99	398	
11	10 mm	3	1770 mm	5 m	350 mm	270 mm	310 mm	310 mm	270 mm	350 mm	3	13	
12	20 mm	14	3500 mm	49 m	250 mm	3300 mm	0 mm	0 mm	0 mm	0 mm	121	483	
		43	125 m								242	969	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



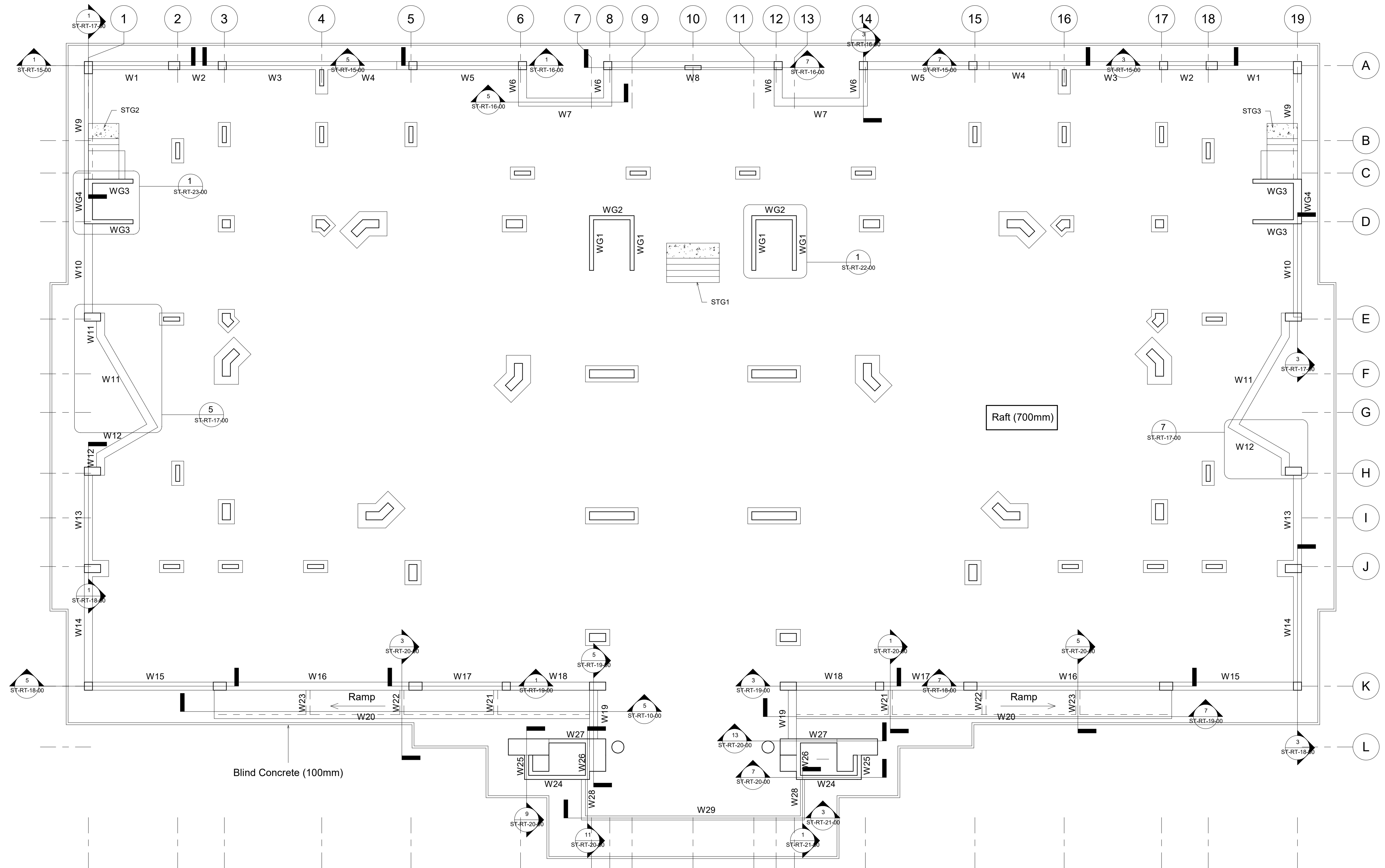
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

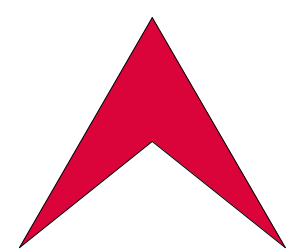
Court of Benghazi North
Benghazi
Piers P4 to P6 Reinforcement

ST-RT-13-00

SCALE:	1 : 25	DATE:	February 2021
DESIGNED:	Refaat Elburki		
DRAWN:	Awad Edrees		



1 Ground Floor Walls
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



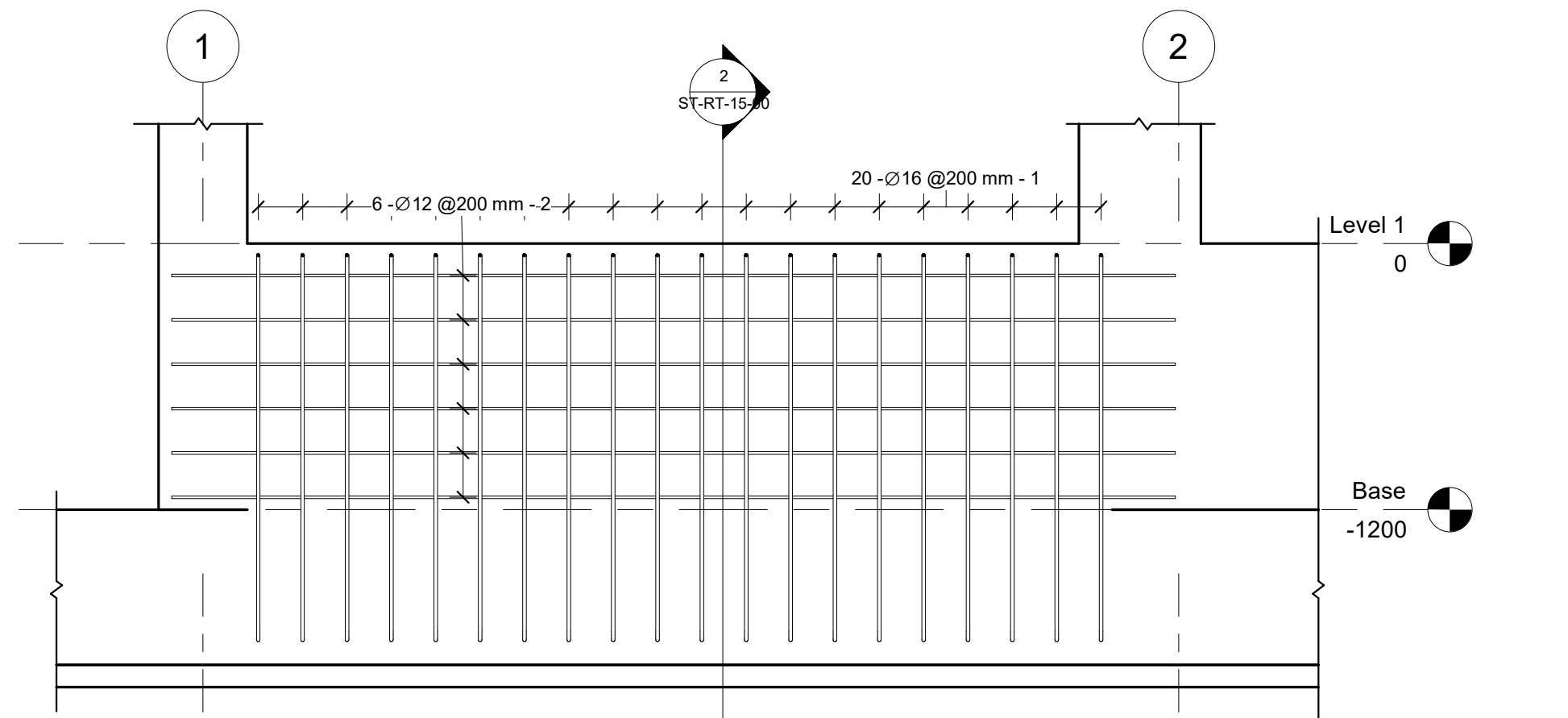
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

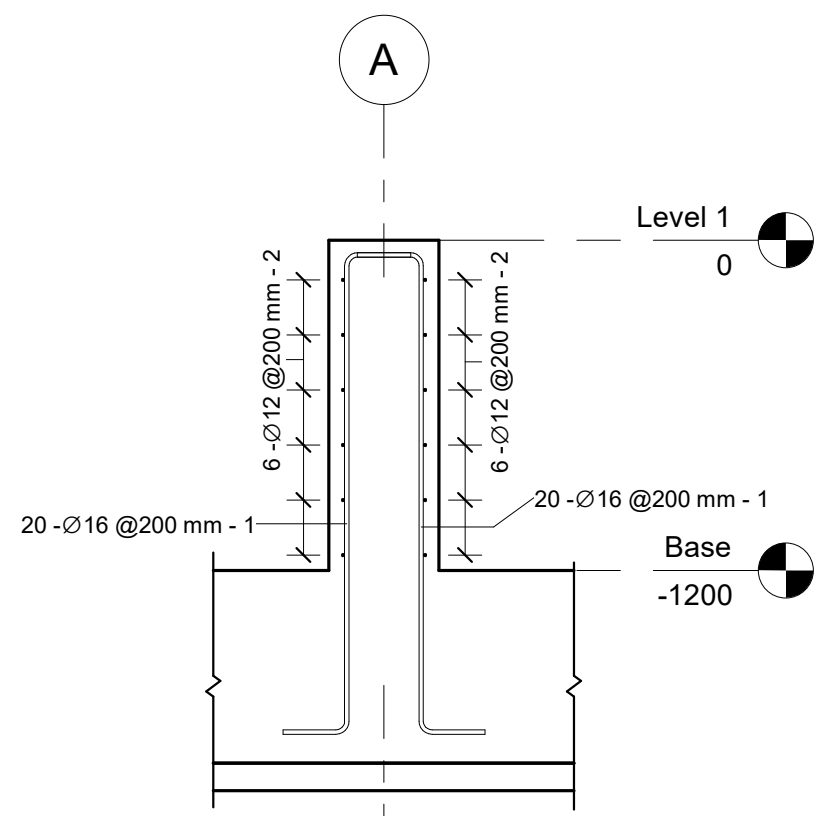
Court of Benghazi North
Benghazi
Ground Floor Walls Layout

ST-RT-14-00

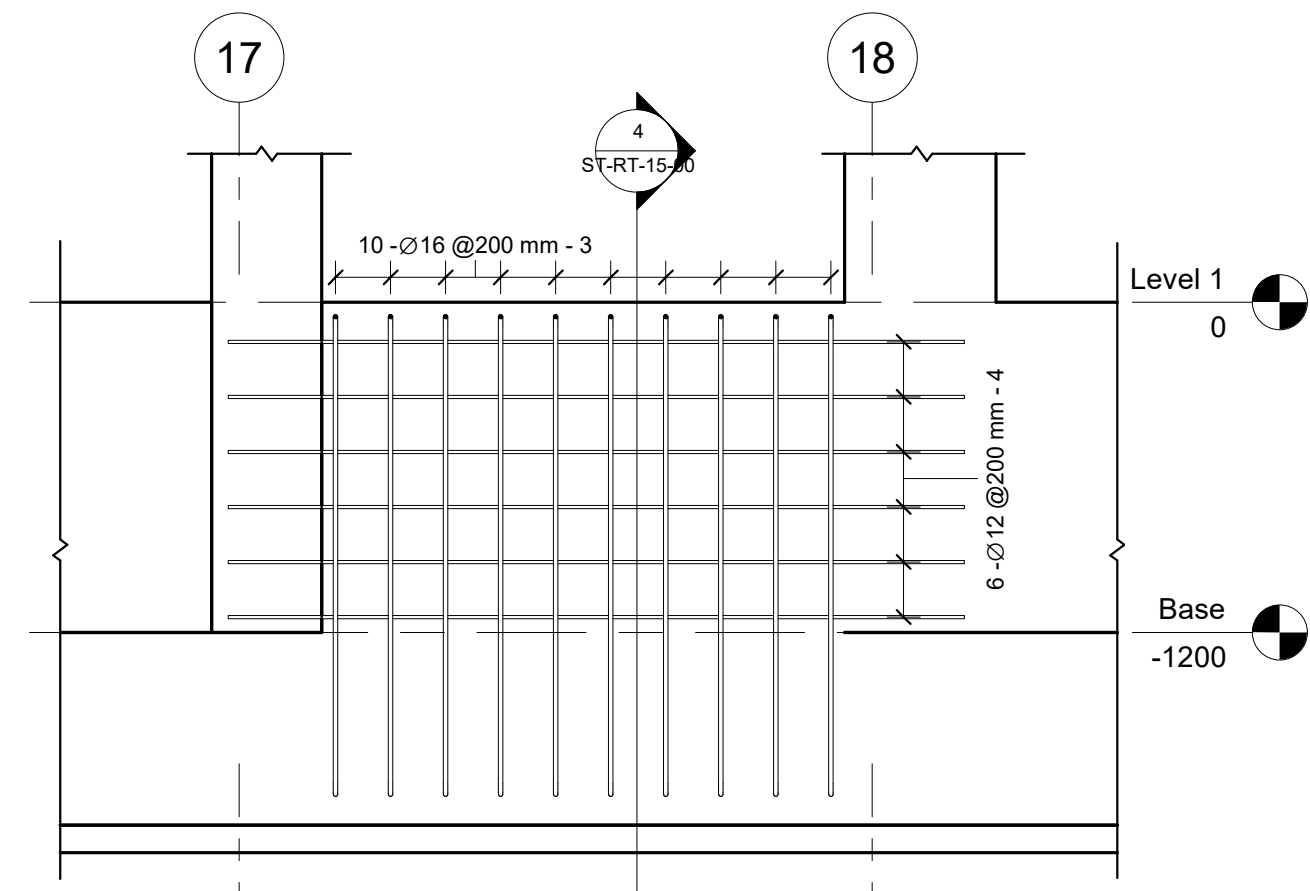
SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



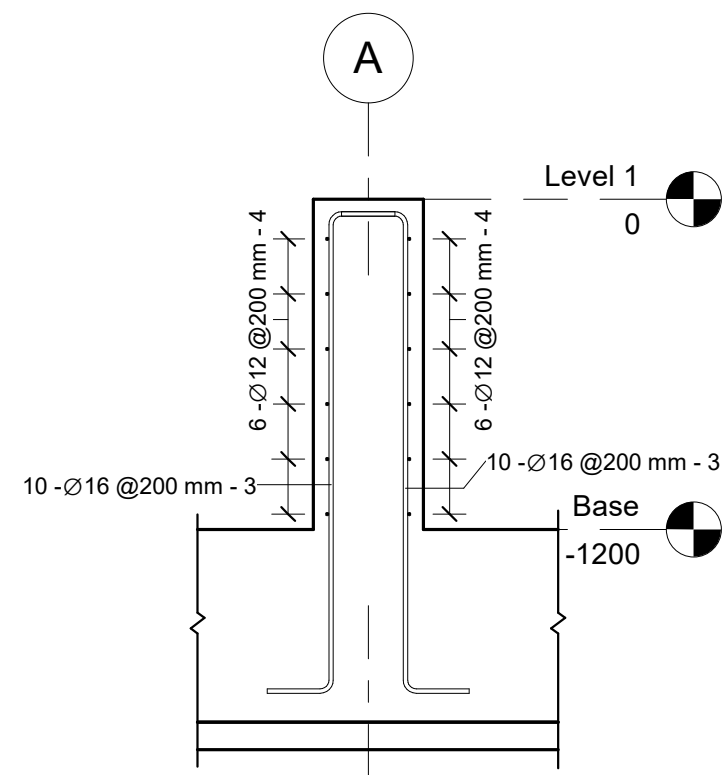
1 W1
1 : 25



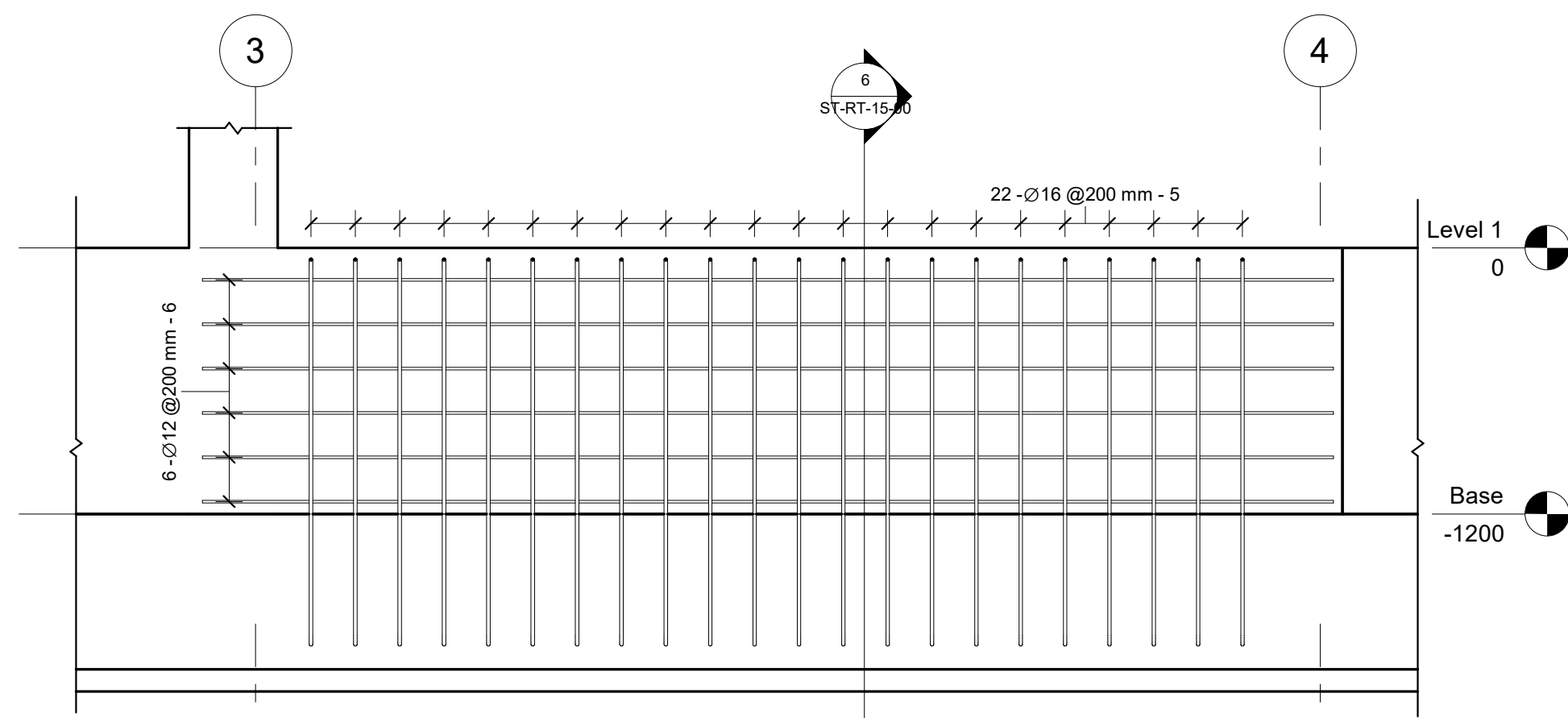
2 W1(Section)
1 : 25



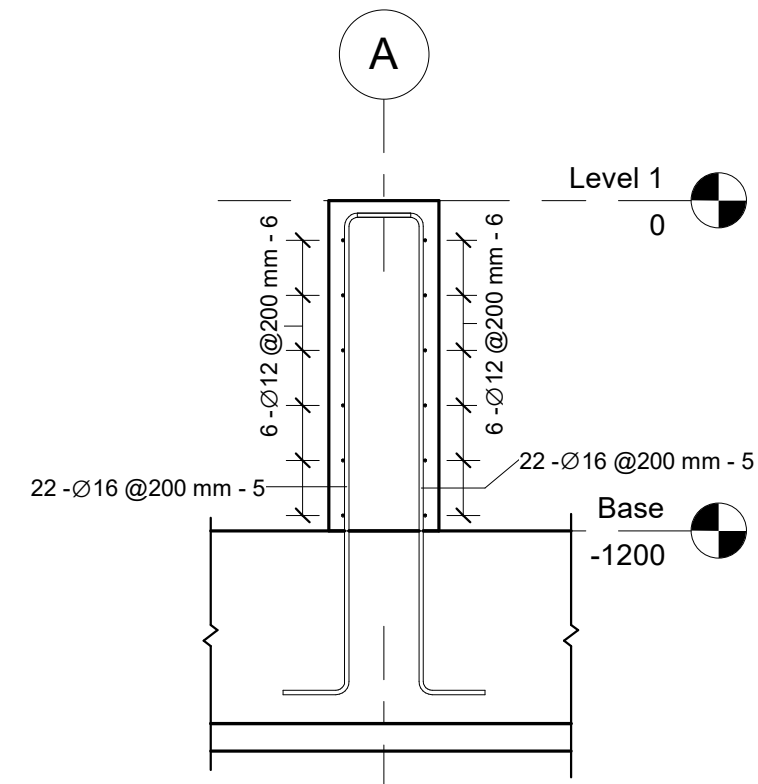
3 W2
1 : 25



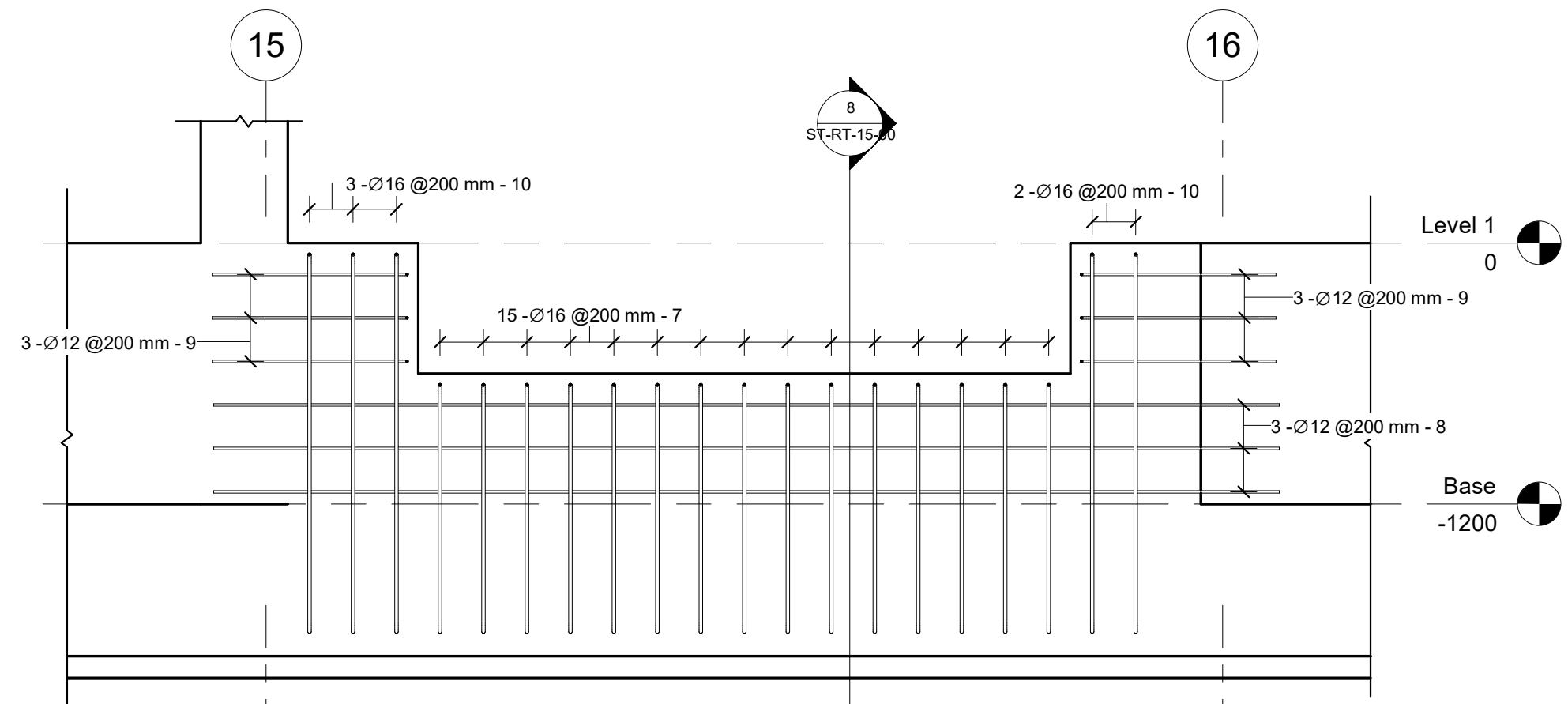
4 W2(Section)
1 : 25



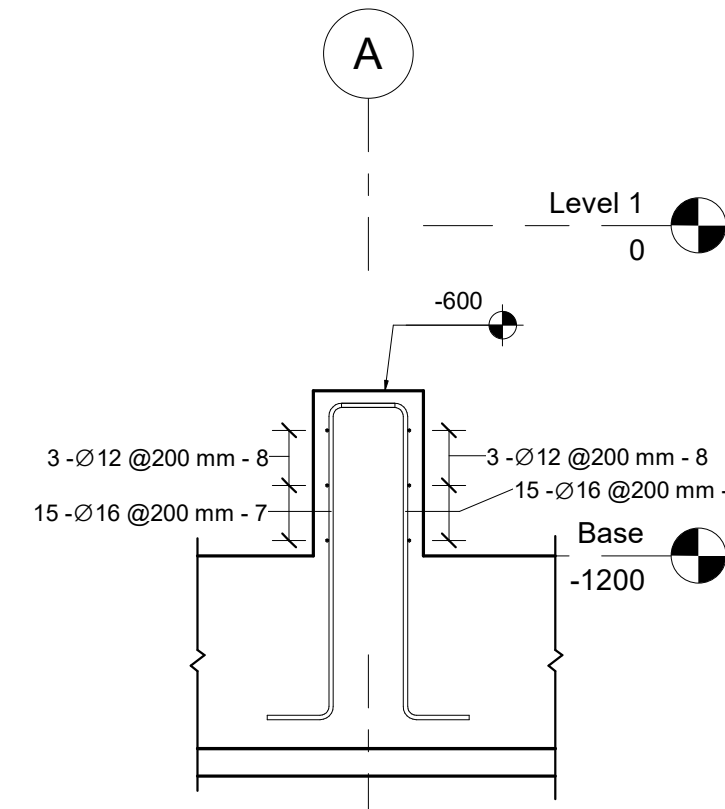
5 W3
1 : 25



6 W3(Section)
1 : 25



7 W4
1 : 25



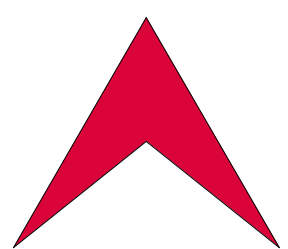
8 W4(Section)
1 : 25

Wall W1 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
1	16 mm	40	2160 mm	86 m	240 mm	1750 mm	240 mm	136	273	
2	12 mm	12	4530 mm	54 m	4530 mm	0 mm	0 mm	48	97	
		52		141 m				185	369	

Wall W2 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
3	16 mm	20	2160 mm	43 m	240 mm	1750 mm	240 mm	68	136	
4	12 mm	12	2680 mm	32 m	2680 mm	0 mm	0 mm	29	57	
		32		75 m				97	193	

Wall W3 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
5	16 mm	44	2160 mm	95 m	240 mm	1750 mm	240 mm	150	300	
6	12 mm	12	5100 mm	61 m	5100 mm	0 mm	0 mm	54	109	
		56		156 m				204	409	

Wall W4 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
7	16 mm	30	1560 mm	47 m	240 mm	1150 mm	240 mm	74	148	
8	12 mm	6	4900 mm	29 m	4900 mm	0 mm	0 mm	26	52	
9	12 mm	12	1120 mm	13 m	240 mm	900 mm	0 mm	12	24	
10	16 mm	10	2160 mm	22 m	240 mm	1750 mm	240 mm	34	68	
		58		111 m				146	292	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

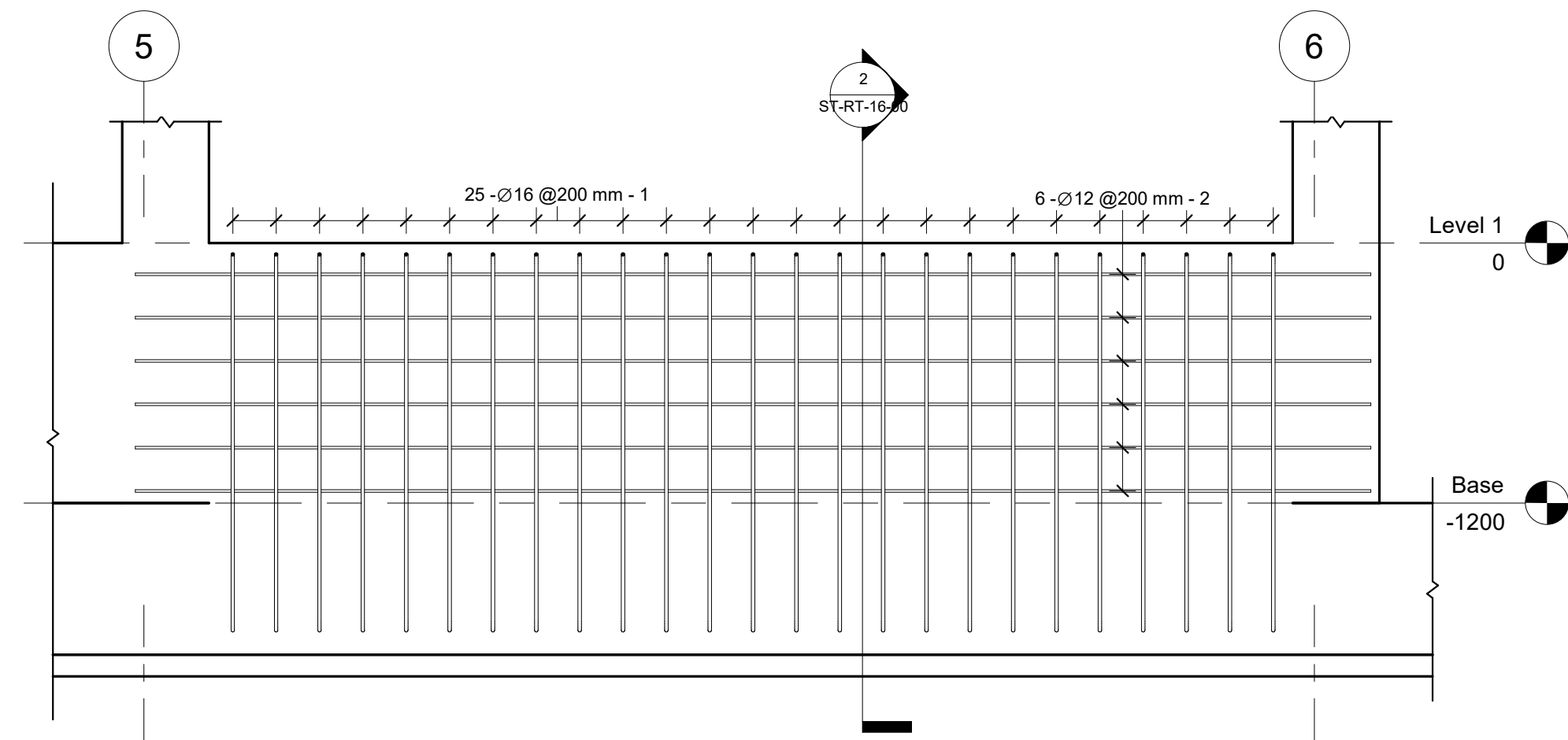


Rev.	AMENDMENT	DATE

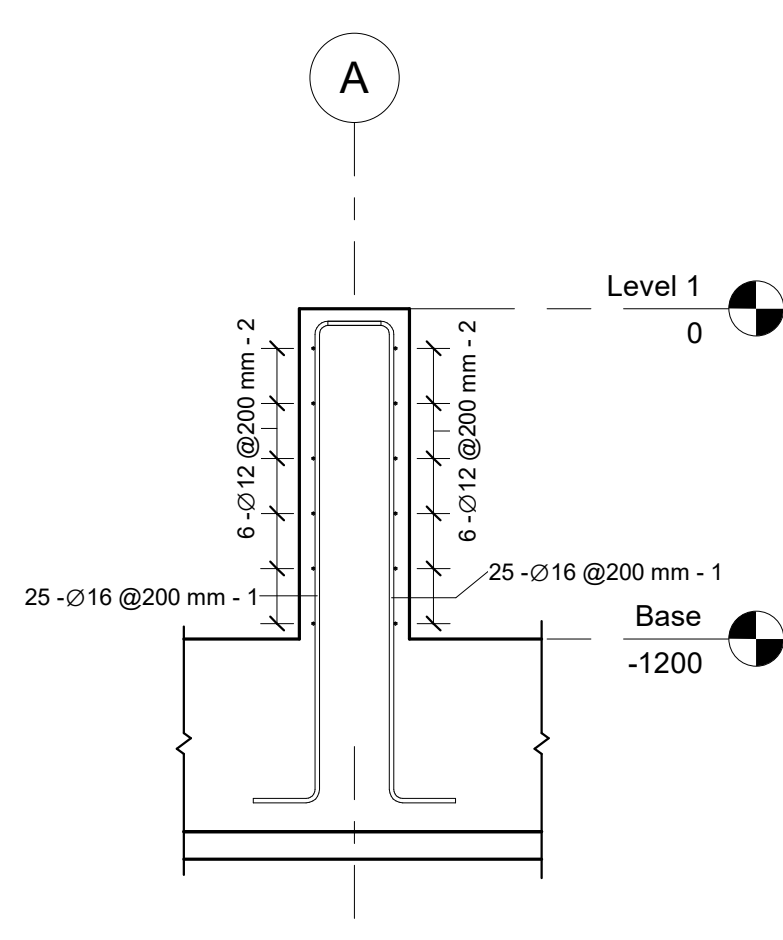
Court of Benghazi North
Benghazi
Walls W1 to W4 Reinforcement

ST-RT-15-00

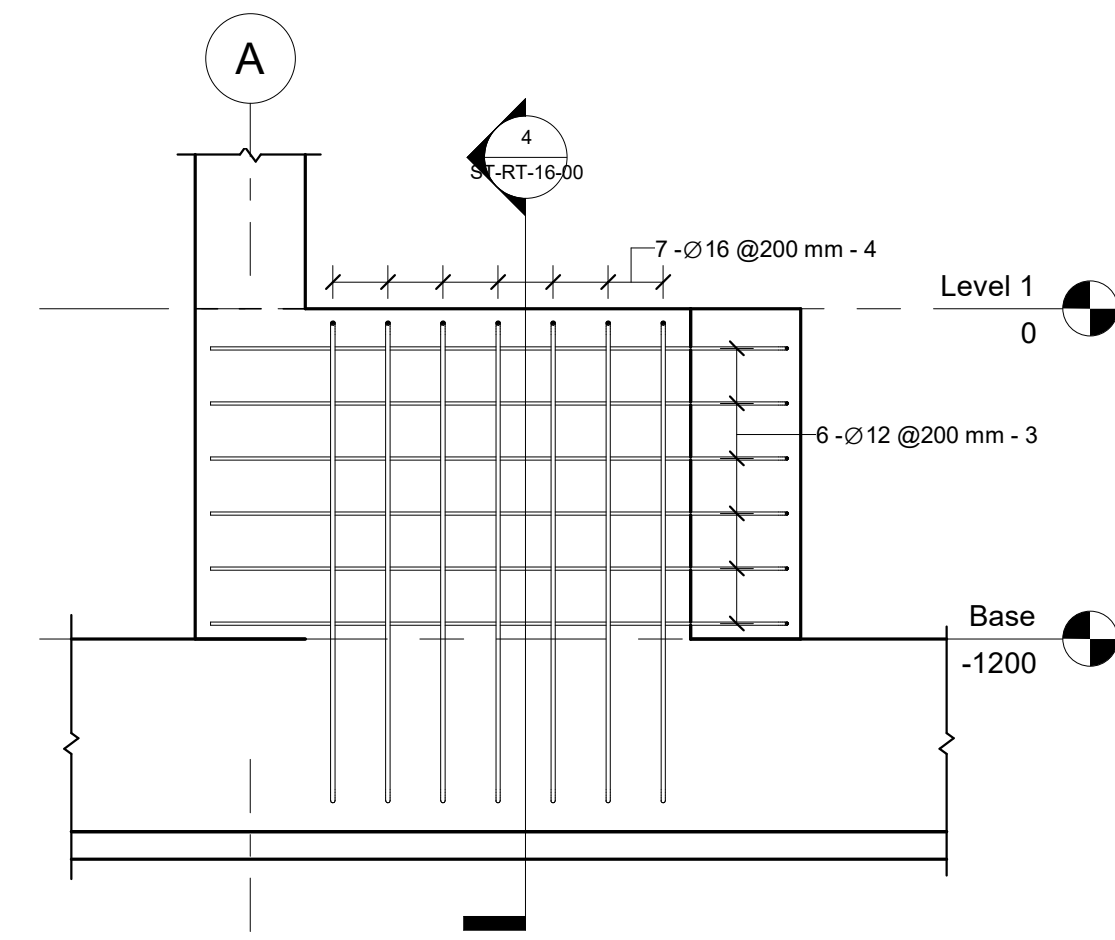
SCALE: 1 : 25	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



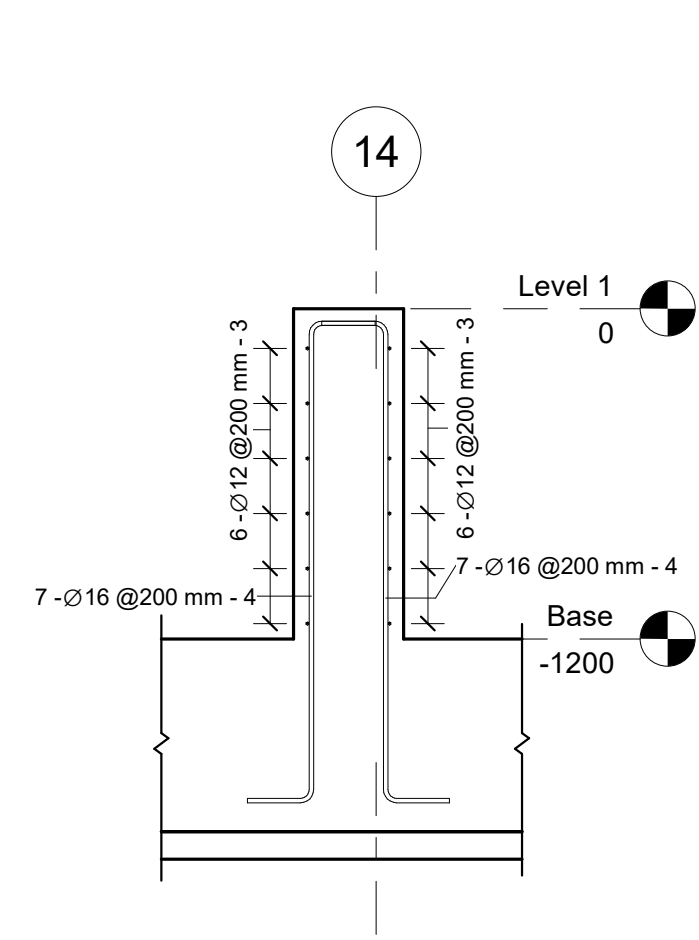
1 W5
1 : 25



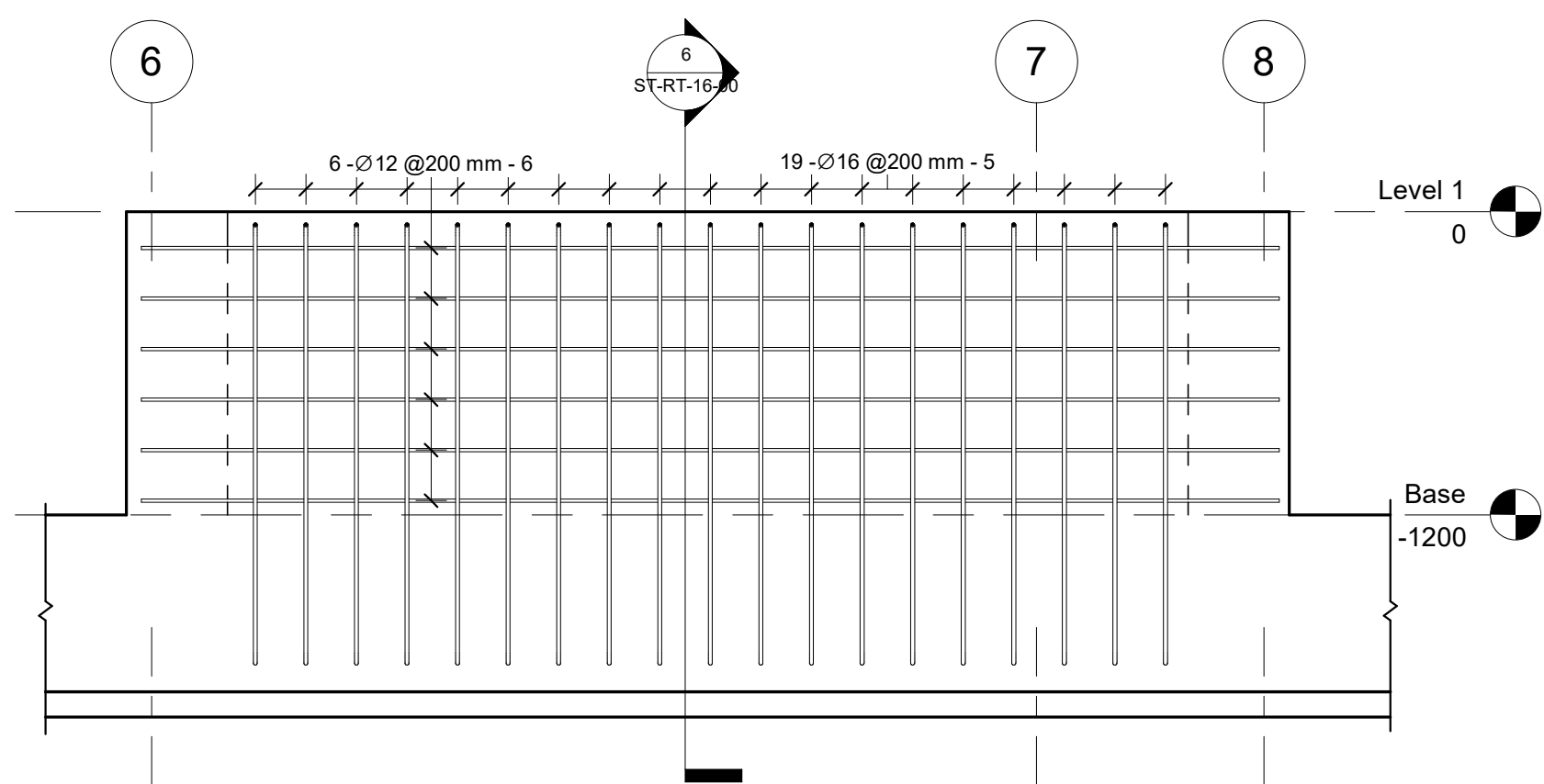
2 W5(Section)
1 : 25



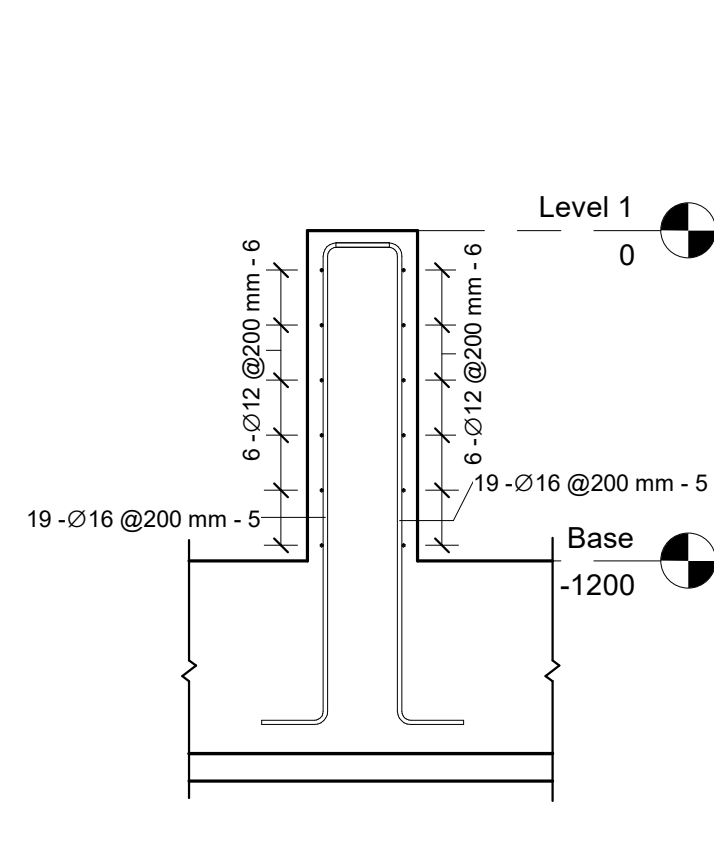
3 W6
1 : 25



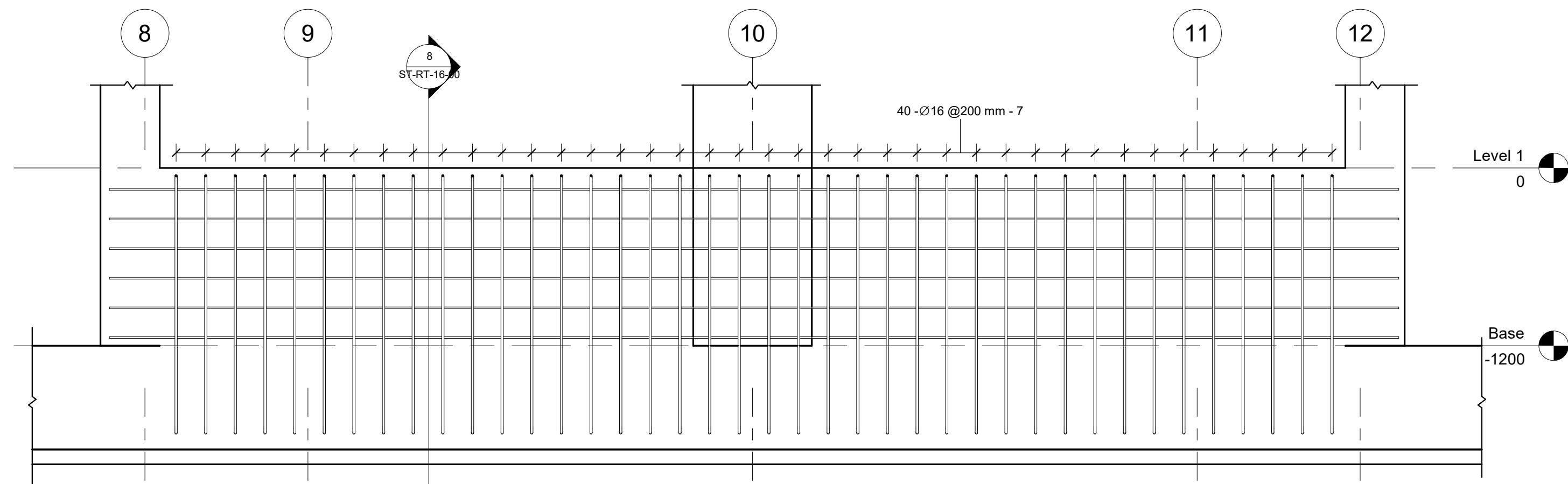
4 W6(Section)
1 : 25



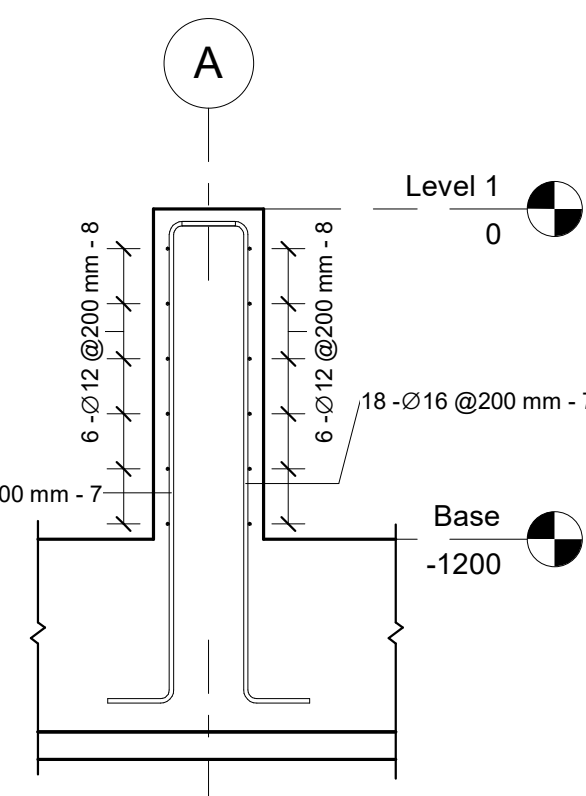
5 W7
1 : 25



6 W7(Section)
1 : 25



7 W8
1 : 25

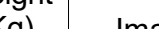
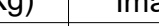


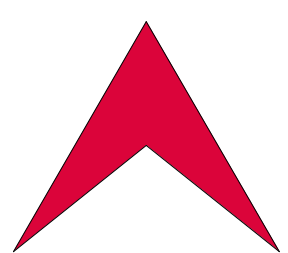
8 W8(Section)
1 : 25

Wall W5 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
1	16 mm	50	2160 mm	108 m	240 mm	1750 mm	240 mm	170	341	
2	12 mm	12	5700 mm	68 m	5700 mm	0 mm	0 mm	61	121	
		62		176 m				231	462	

Wall W6 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 4 Walls	Image
3	12 mm	12	2320 mm	28 m	240 mm	2100 mm	0 mm	25	99	
4	16 mm	14	2160 mm	30 m	240 mm	1750 mm	240 mm	48	191	
		26		58 m				72	290	

Wall W7 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
5	16 mm	38	2160 mm	82 m	240 mm	1750 mm	240 mm	130	259	
6	12 mm	12	4500 mm	54 m	4500 mm	0 mm	0 mm	48	96	
		50		136 m				177	355	

Wall W8 Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Image
7	16 mm	76	2160 mm	164 m	240 mm	1750 mm	240 mm	259	
8	12 mm	12	8700 mm	104 m	8700 mm	0 mm	0 mm	93	
		88		269 m				352	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



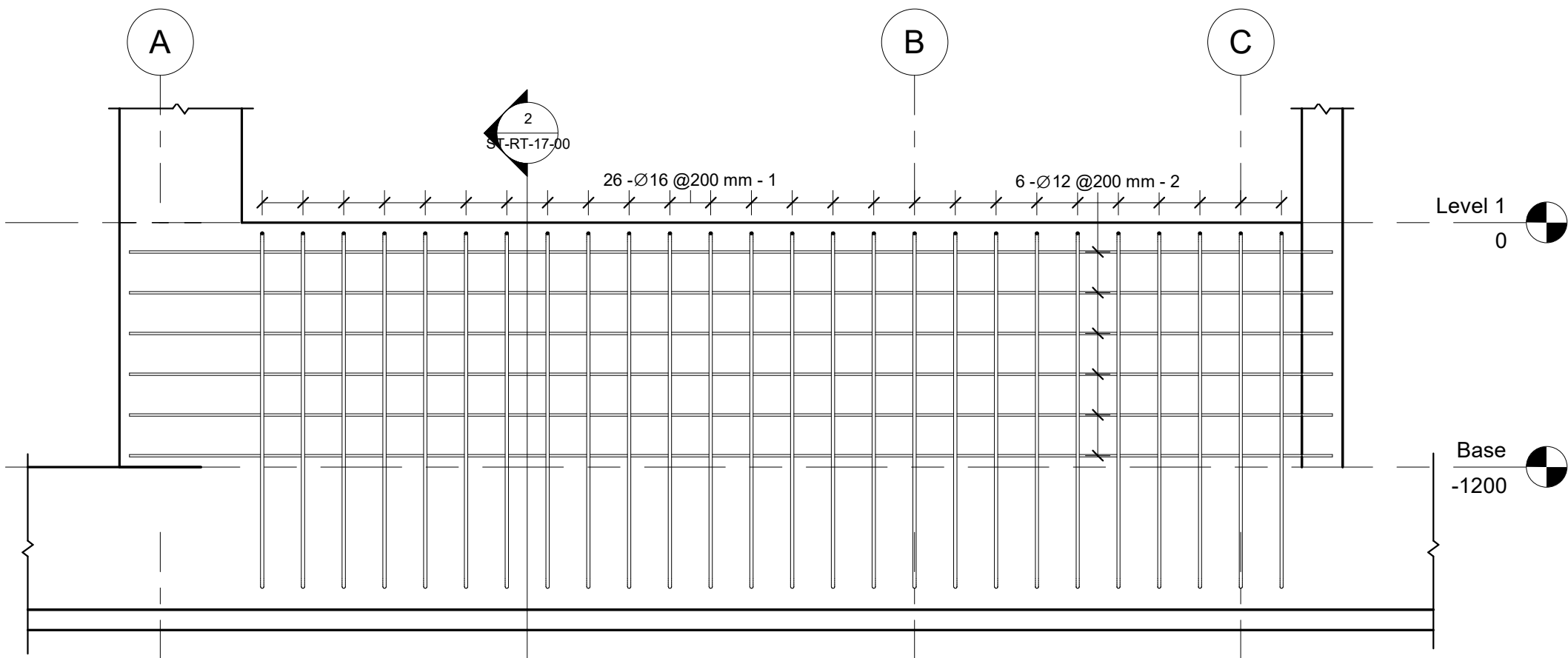
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

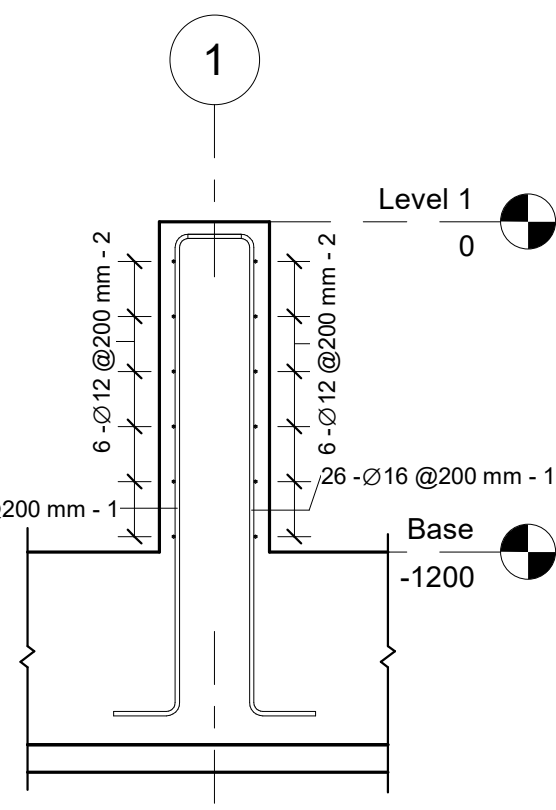
Court of Benghazi North
Benghazi
Walls W5 to W8 Reinforcement

ST-RT-16-00

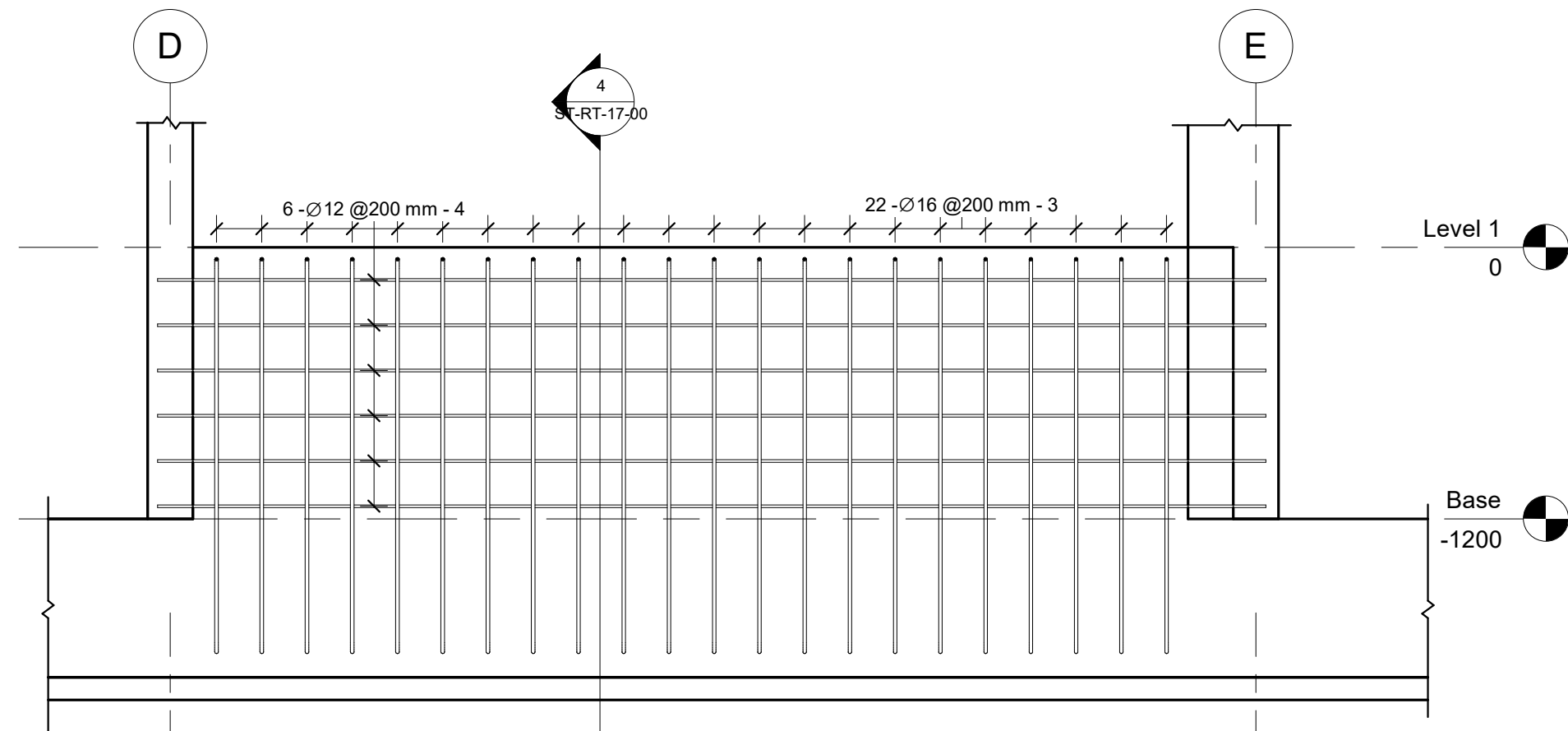
SCALE: 1 : 25	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



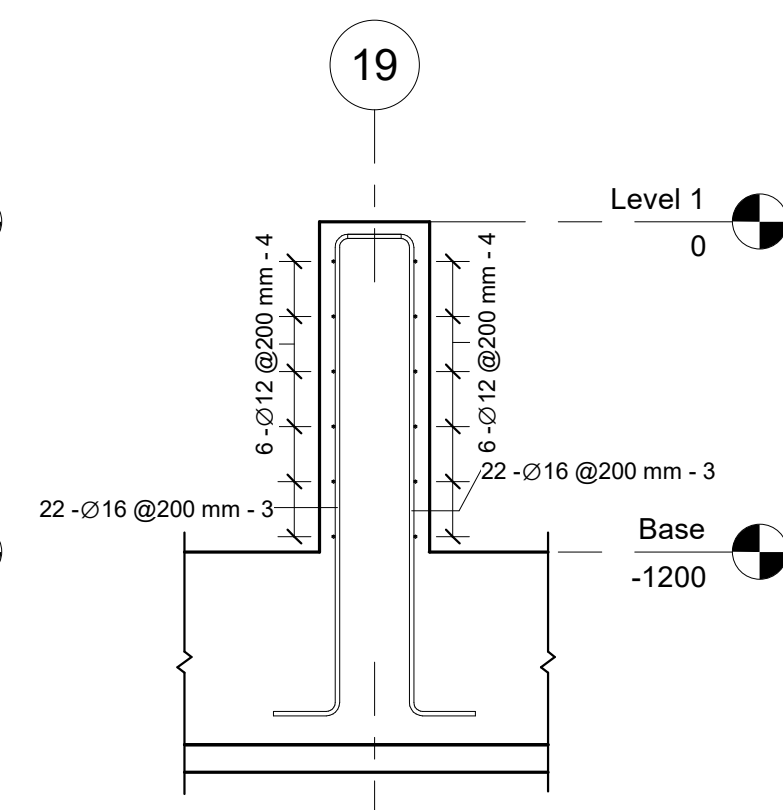
1 W9
1 : 25



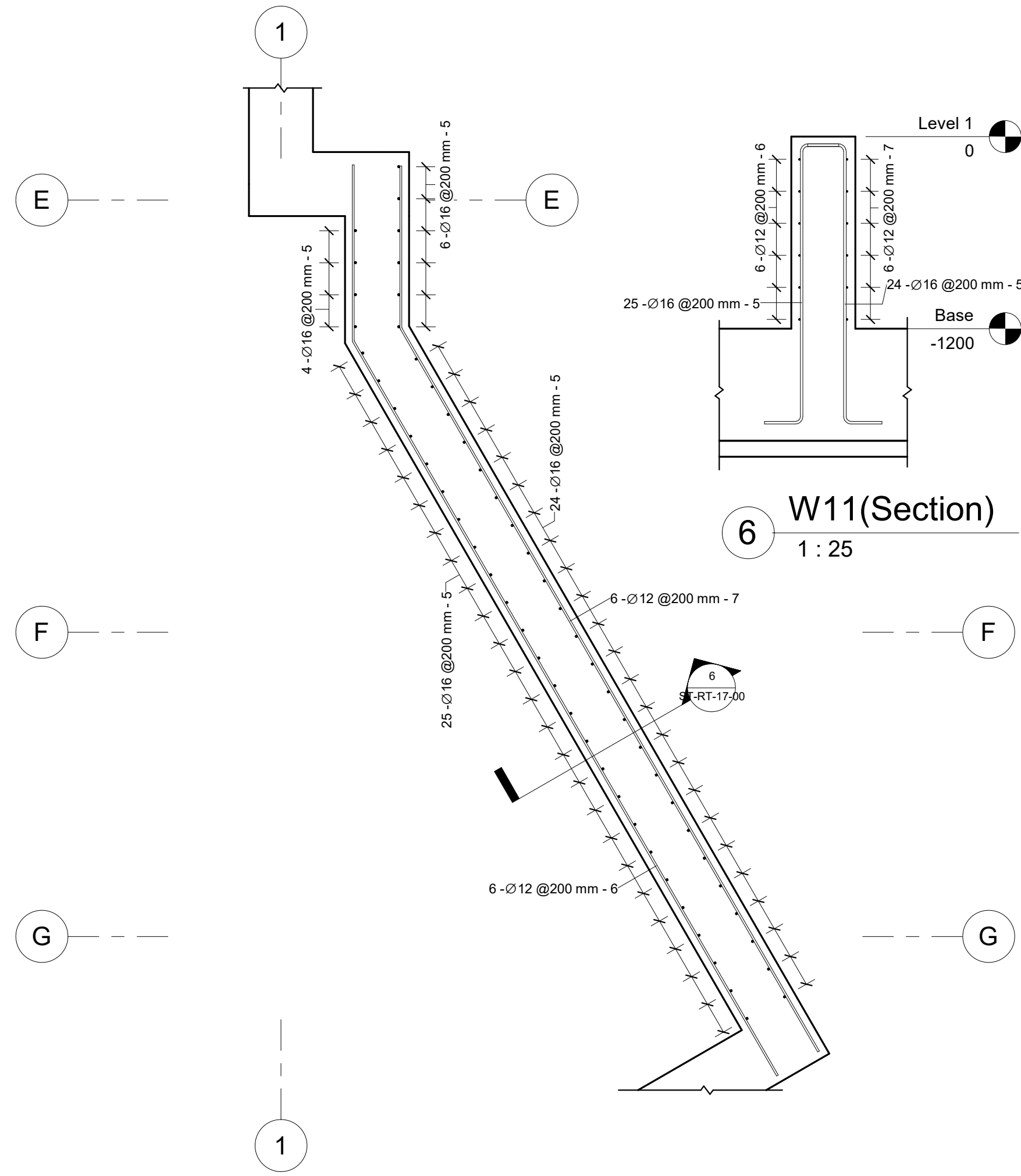
2 W9(Section)
1 : 25



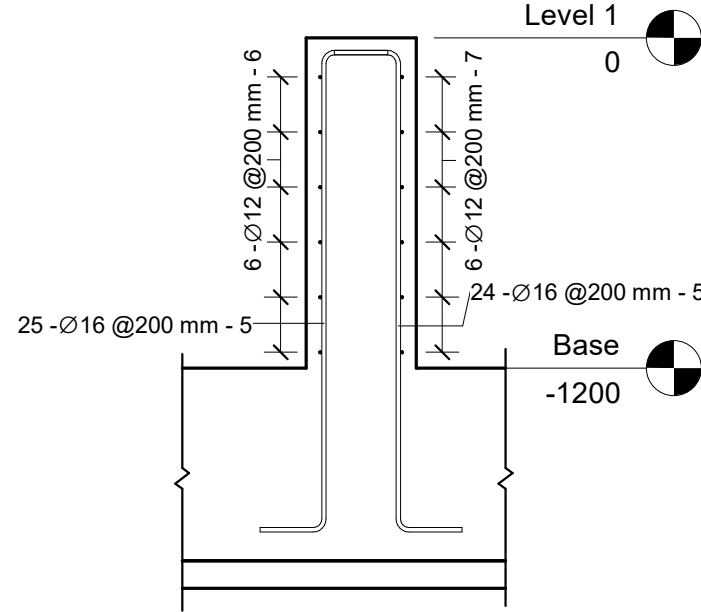
3 W10
1 : 25



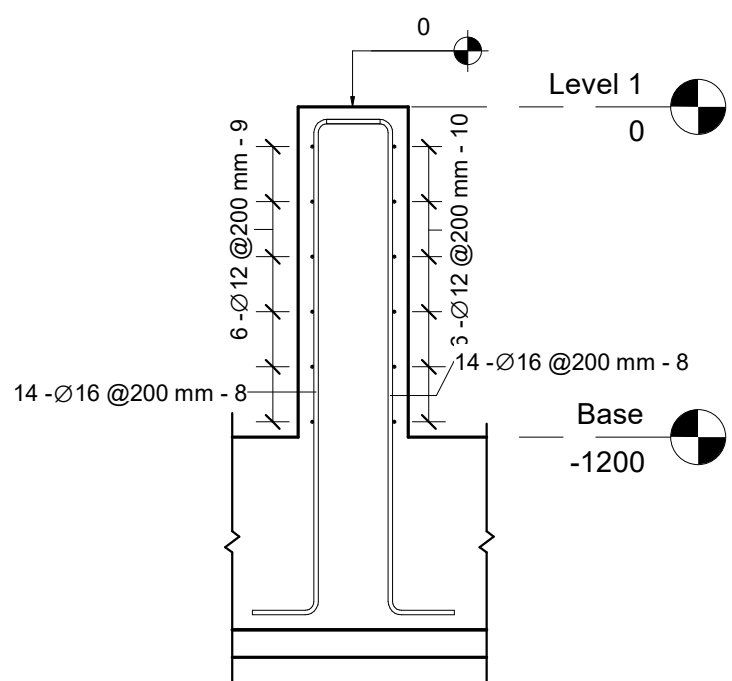
4 W10(Section)
1 : 25



5 W11
1 : 25

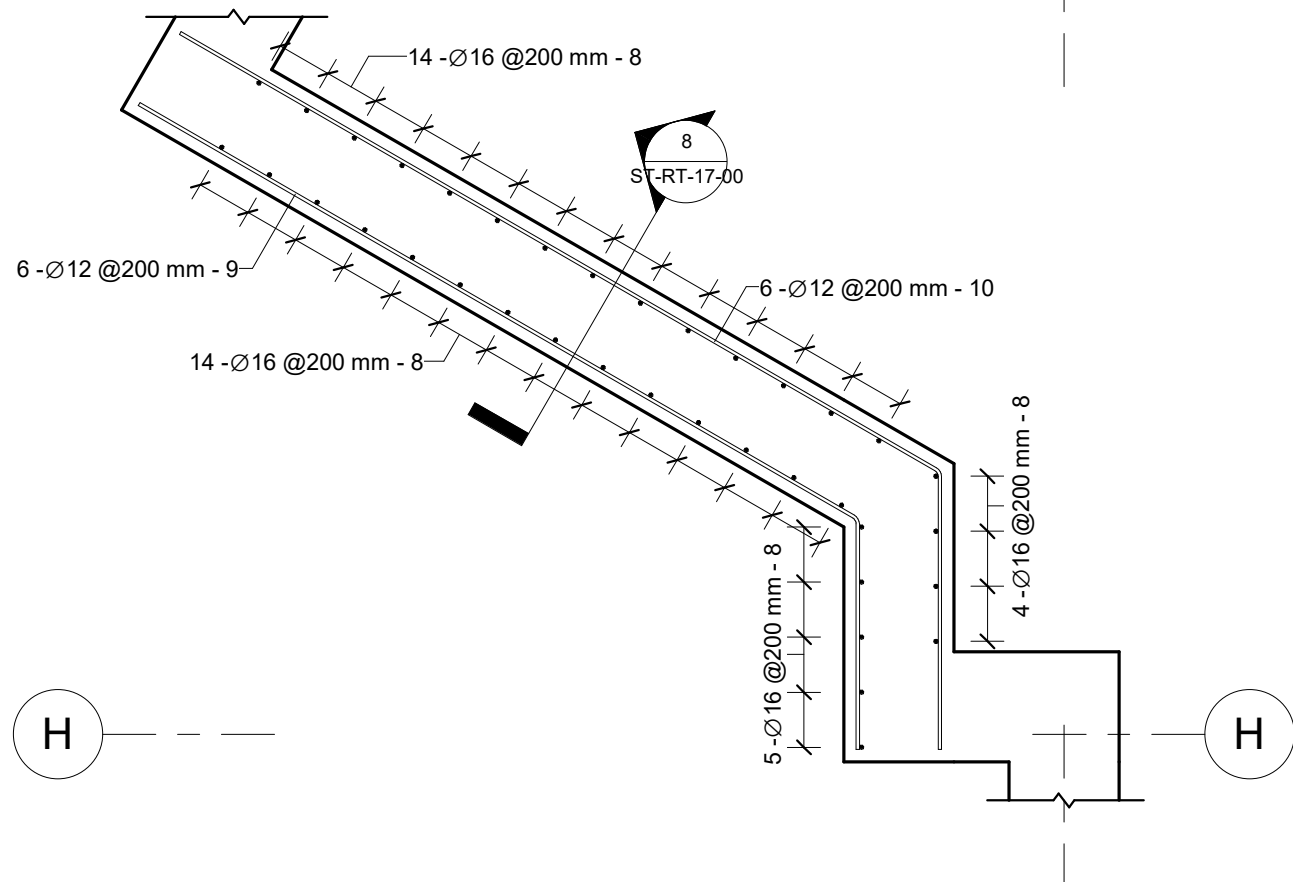


6 W11(Section)
1 : 25



7 W12
1 : 25

8 W12(Section)
1 : 25

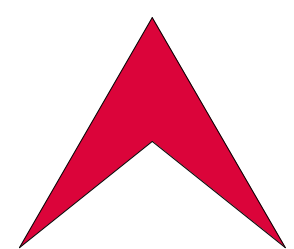


Wall W9 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
1	16 mm	52	2160 mm	112 m	240 mm	1750 mm	240 mm	177	355	
2	12 mm	12	5900 mm	71 m	5900 mm	0 mm	0 mm	63	126	
		64		183 m				240	480	

Wall W10 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
3	16 mm	44	2160 mm	95 m	240 mm	1750 mm	240 mm	150	300	
4	12 mm	12	4900 mm	59 m	4900 mm	0 mm	0 mm	52	104	
		56		154 m				202	404	

Wall W11 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
5	16 mm	59	2160 mm	127 m	240 mm	1750 mm	240 mm	201	402	
6	12 mm	6	6400 mm	38 m	1100 mm	550 mm	5300 mm	34	68	
7	12 mm	6	6230 mm	37 m	1010 mm	510 mm	5220 mm	33	66	
		71		203 m				268	537	

Wall W12 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
8	16 mm	37	2210 mm	82 m	240 mm	1800 mm	240 mm	129	258	
9	12 mm	6	3850 mm	23 m	840 mm	3020 mm	0 mm	21	41	
10	12 mm	6	4190 mm	25 m	1010 mm	3190 mm	0 mm	22	45	
		49		130 m				172	344	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

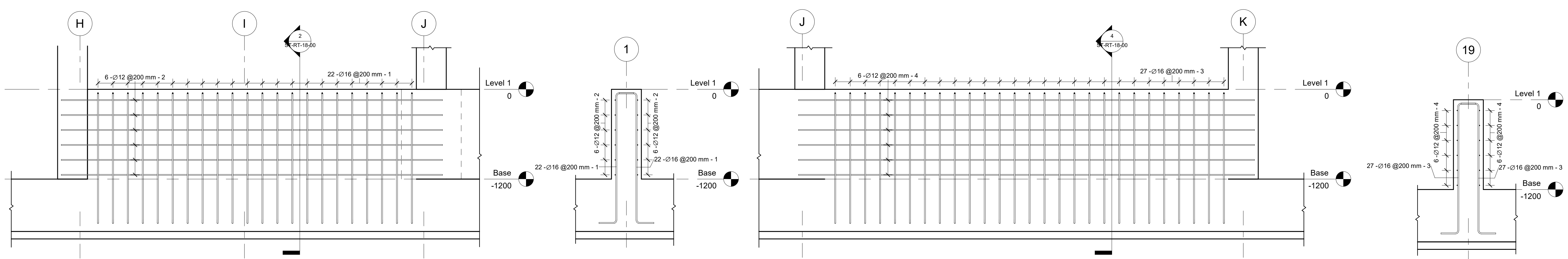
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Walls W9 to W12 Reinforcement

SCALE: 1 : 25
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

DATE: February 2021

ST-RT-17-00

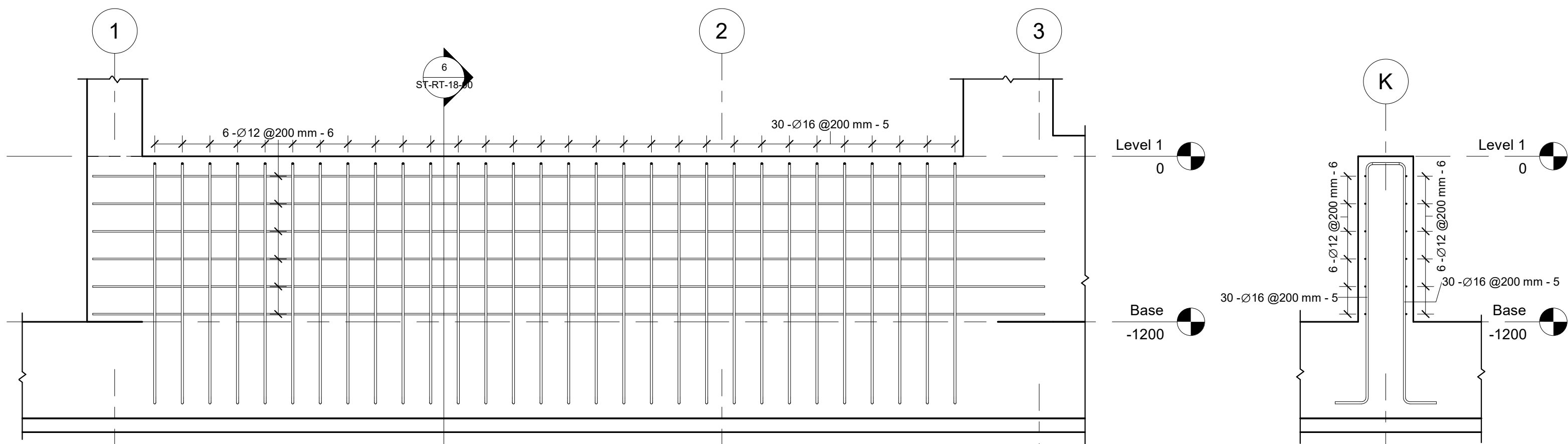


1 W13
1 : 25

2 W13(Section)
1 : 25

3 W14
1 : 25

4 W14(Section)
1 : 25



5 W15
1 : 25

6 W15(Section)
1 : 25

7 W16
1 : 25

8 W16(Section)
1 : 25

Wall W13 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
1	16 mm	44	2160 mm	95 m	240 mm	1750 mm	240 mm	150	300	
2	12 mm	12	5100 mm	61 m	5100 mm	0 mm	0 mm	54	109	
		56		156 m				204	409	

Wall W14 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
3	16 mm	54	2160 mm	117 m	240 mm	1750 mm	240 mm	184	368	
4	12 mm	12	6100 mm	73 m	6100 mm	0 mm	0 mm	65	130	
		66		190 m				249	498	

Wall W15 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
5	16 mm	60	2160 mm	130 m	240 mm	1750 mm	240 mm	205	409	
6	12 mm	12	6900 mm	83 m	6900 mm	0 mm	0 mm	74	147	
		72		212 m				278	556	

Wall W16 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
7	12 mm	12	10200 mm	122 m	10200 mm	0 mm	0 mm	109	217	
8	16 mm	90	2160 mm	194 m	240 mm	1750 mm	240 mm	307	614	
		102		317 m				415	831	

Libyan
Center
For Engineering
Consultancy
Certified From Autodesk

AL-baraka
Jamal Abdalnasser st.
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Walls W13 to W16 Reinforcement

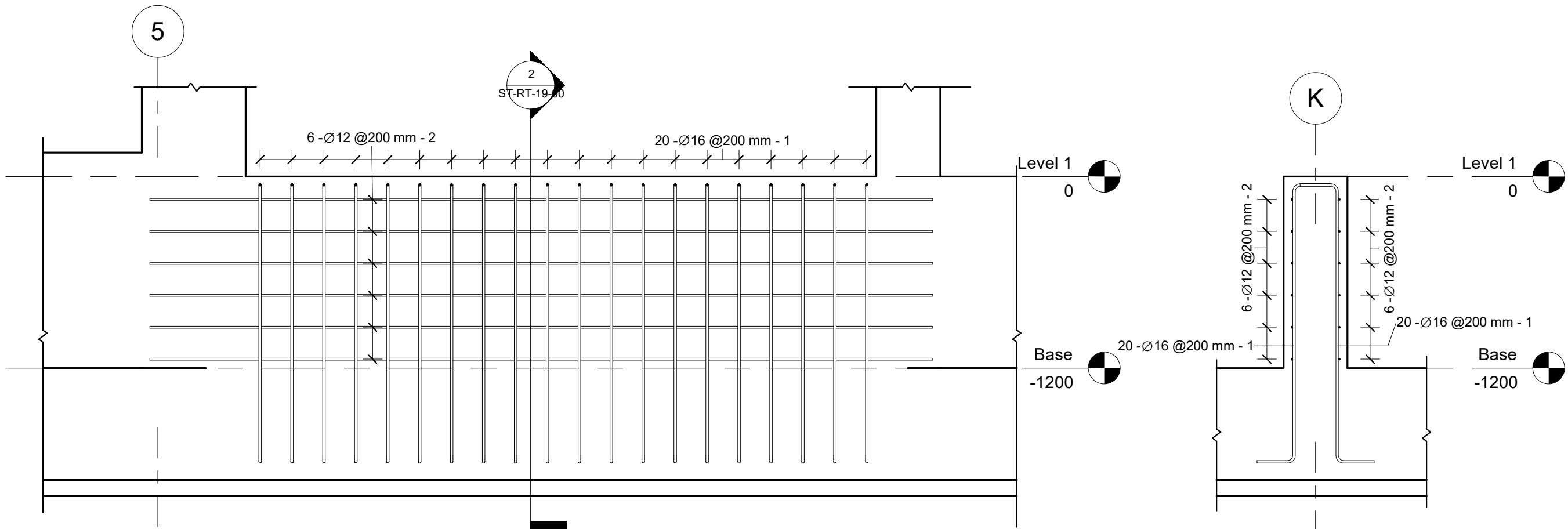
ST-RT-18-00

SCALE: 1 : 25

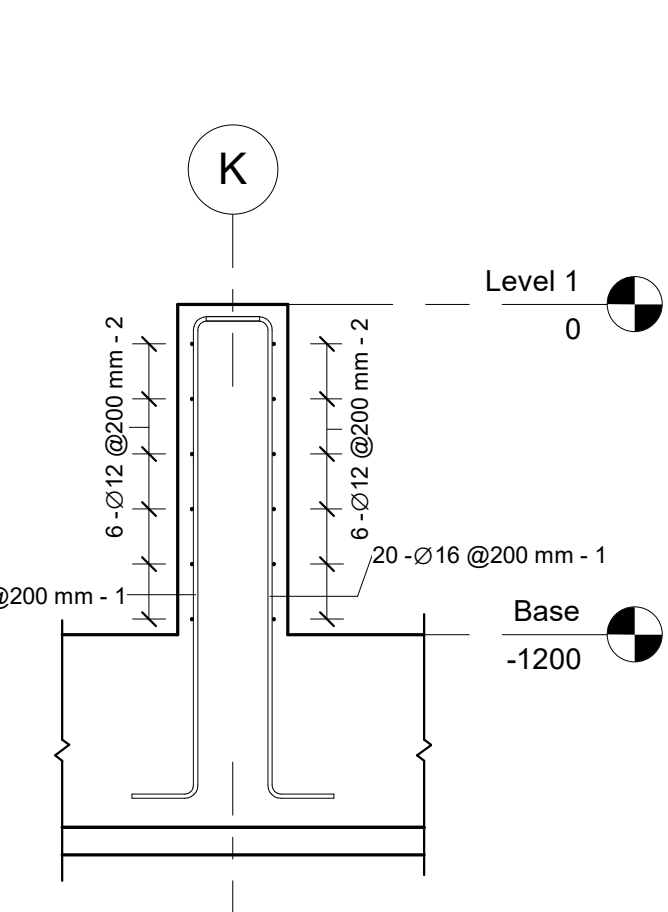
DESIGNED: Refaat Elburki

DRAWN: Awad Edrees

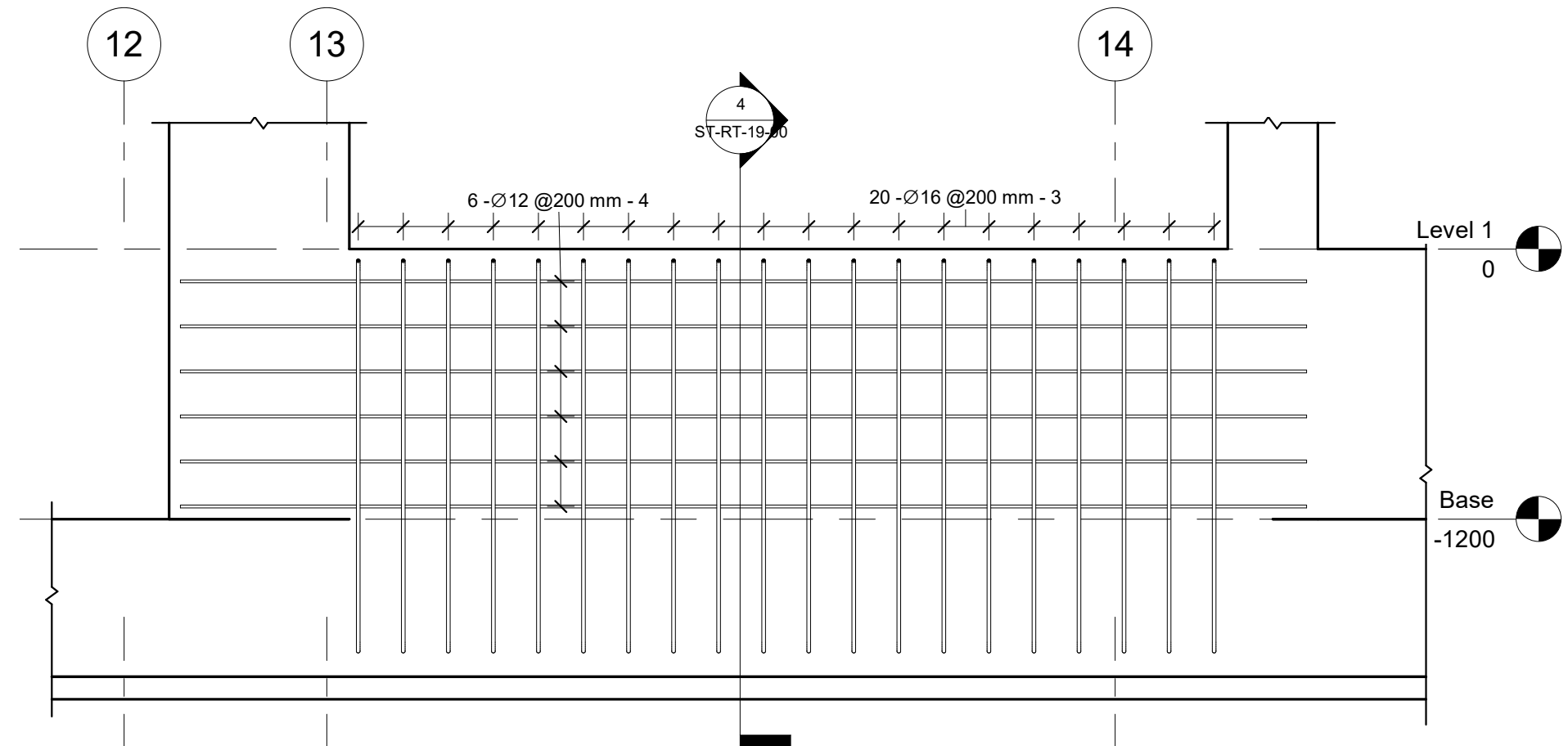
DATE: February 2021



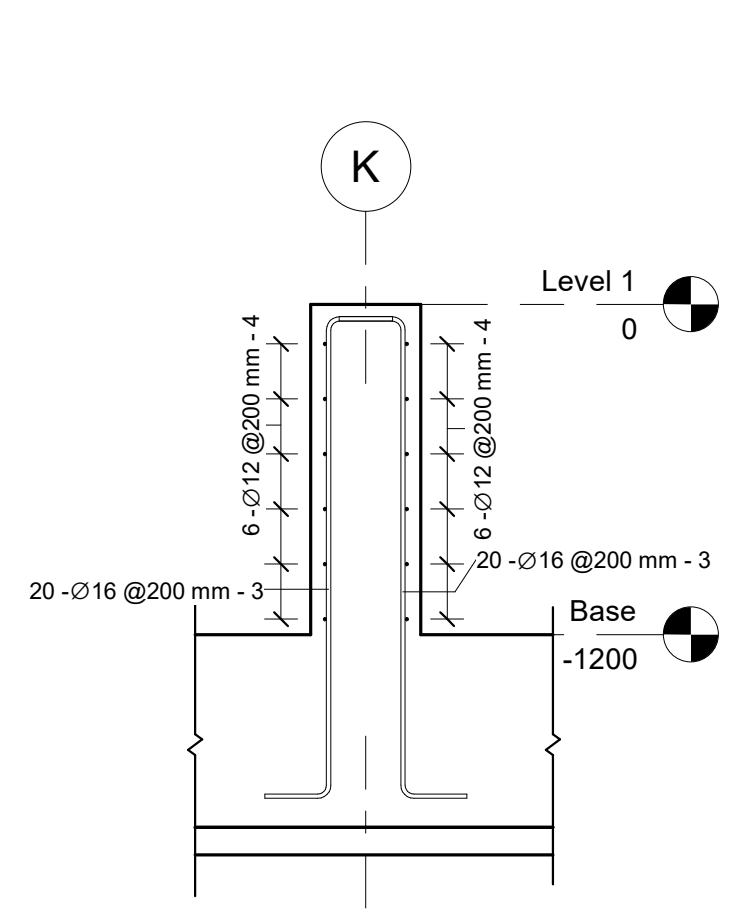
1 W17
1 : 25



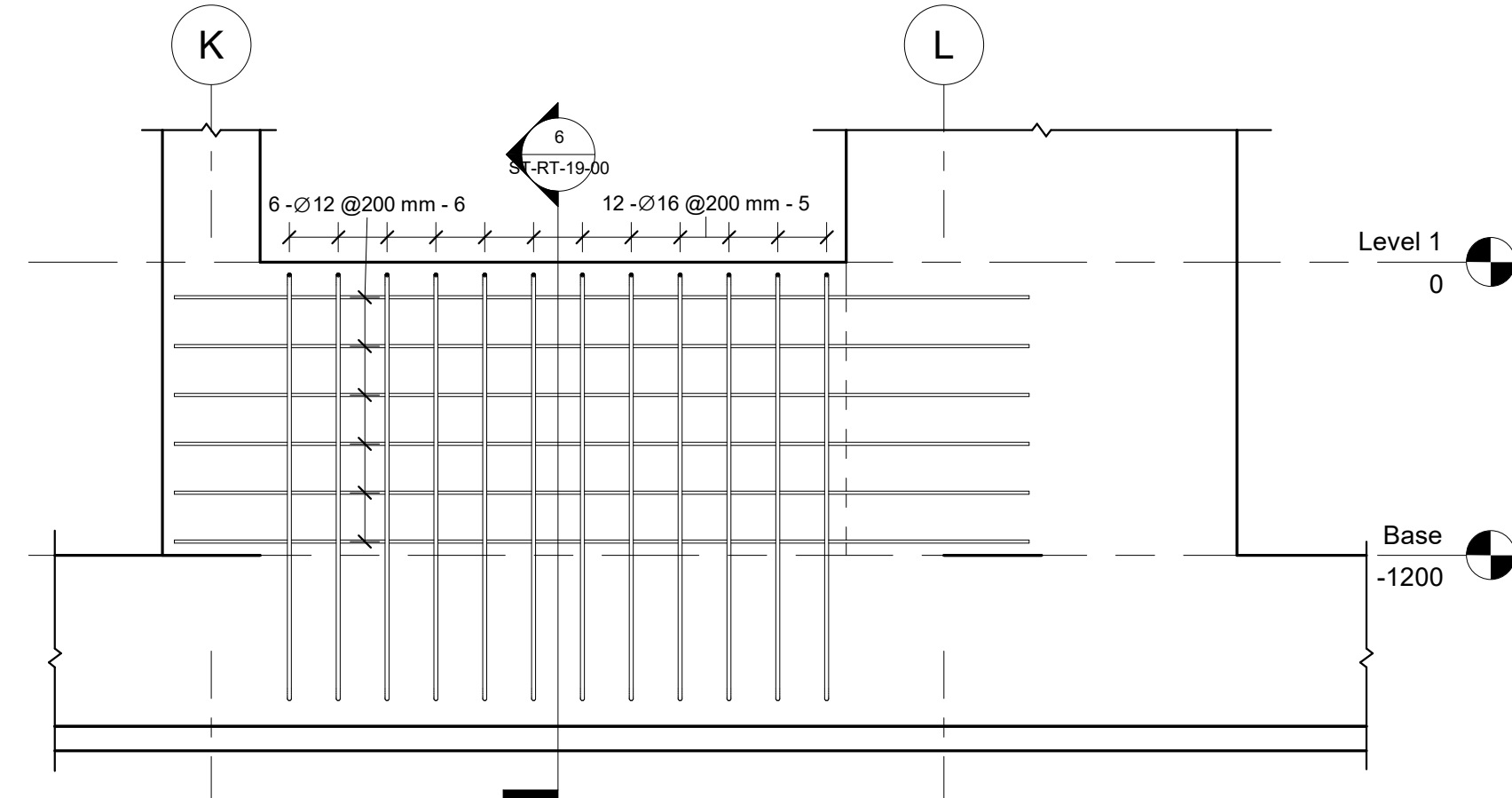
2 W17(Section)
1 : 25



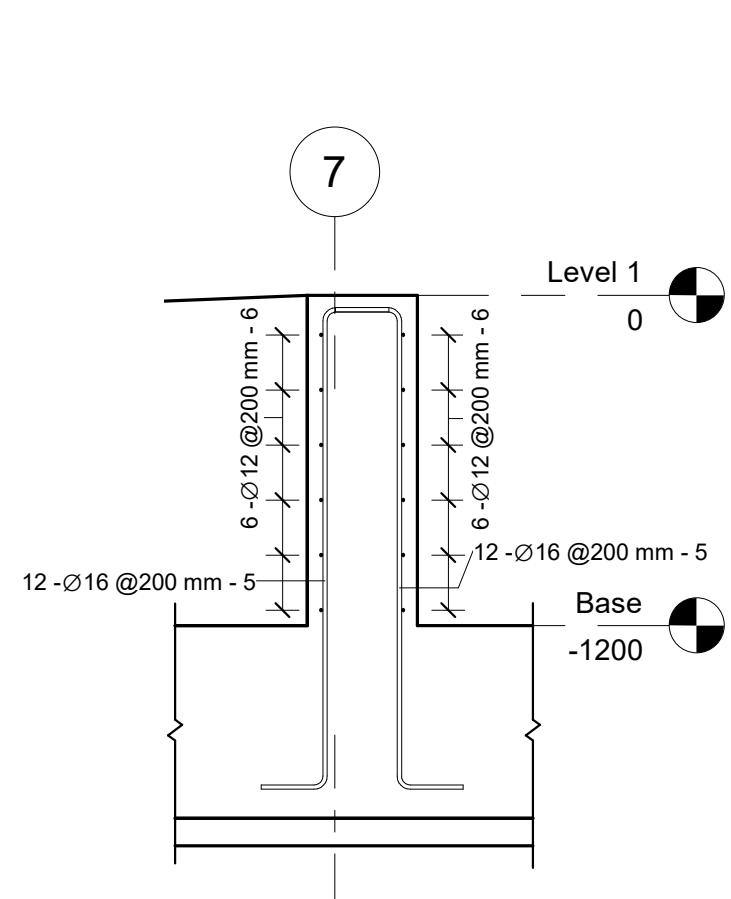
3 W18
1 : 25



4 W18(Section)
1 : 25



5 W19
1 : 25



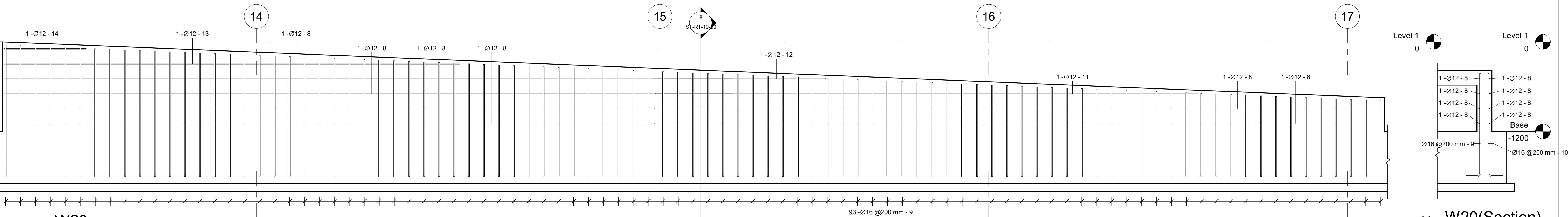
6 W19(Section)
1 : 25

Wall W17 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
1	16 mm	40	2160 mm	86 m	240 mm	1750 mm	240 mm	136	273	
2	12 mm	12	4900 mm	59 m	4900 mm	0 mm	0 mm	52	104	
		52		145 m				189	377	

Wall W19 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
5	16 mm	24	2160 mm	52 m	240 mm	1750 mm	240 mm	82	164	
6	12 mm	12	3500 mm	42 m	3500 mm	0 mm	0 mm	37	75	
		36		94 m				119	238	

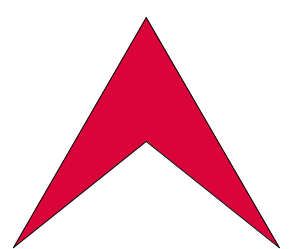
Wall W18 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
3	16 mm	40	2160 mm	86 m	240 mm	1750 mm	240 mm	136	273	
4	12 mm	12	5000 mm	60 m	5000 mm	0 mm	0 mm	53	107	
		52		146 m				190	379	

Wall W20 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
8	12 mm	12	9750 mm	117 m	9750 mm	0 mm	0 mm	104	208	
9	16 mm	93		145 m	200 mm		0 mm	229	458	
10	16 mm	93		145 m	200 mm		0 mm	229	458	
11	12 mm	2	7250 mm	15 m	7250 mm	0 mm	0 mm	13	26	
12	12 mm	2	2300 mm	5 m	2300 mm	0 mm	0 mm	4	8	
13	12 mm	2	6100 mm	12 m	6100 mm	0 mm	0 mm	11	22	
14	12 mm	2	1100 mm	2 m	1100 mm	0 mm	0 mm	2	4	
		206		440 m				591	1183	



7 W20
1 : 25

8 W20(Section)
1 : 25



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

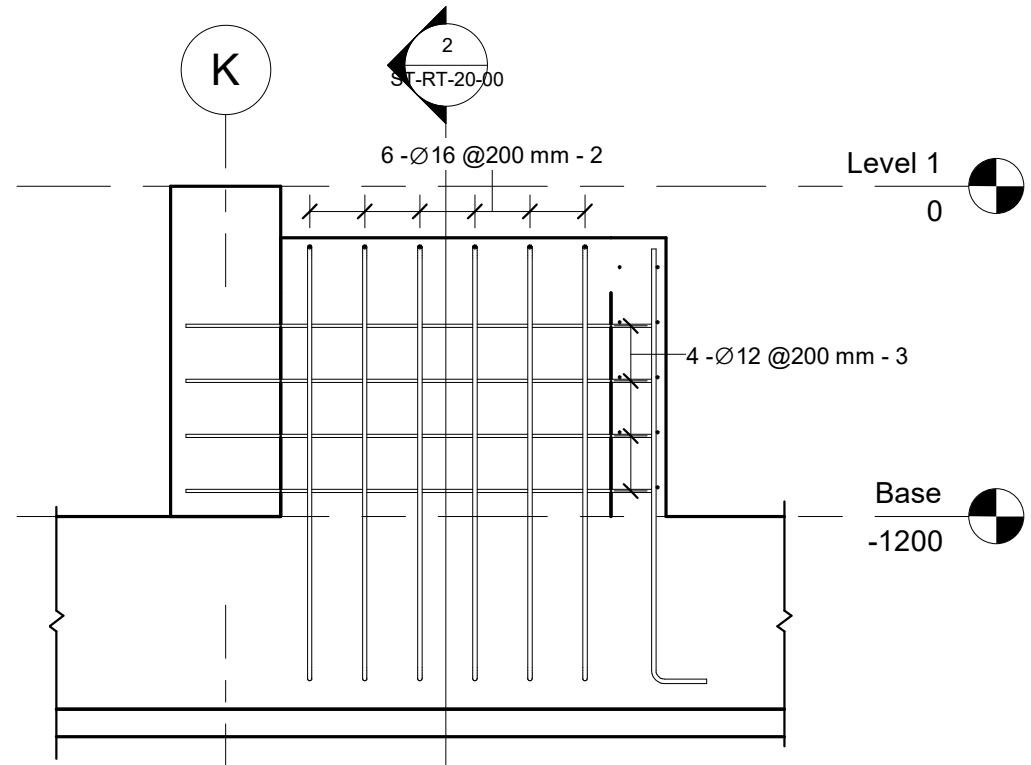
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Walls W17 to W20 Reinforcement

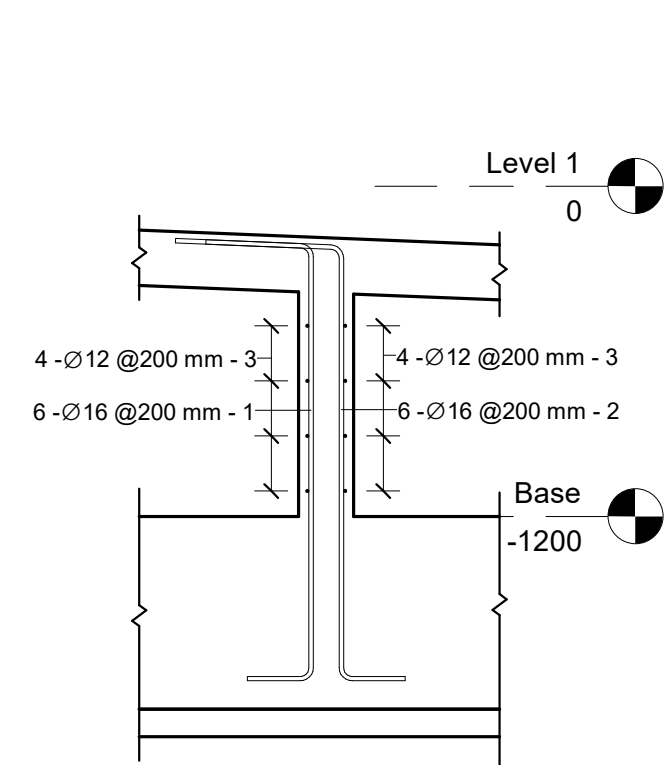
SCALE: 1 : 25
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

DATE: February 2021

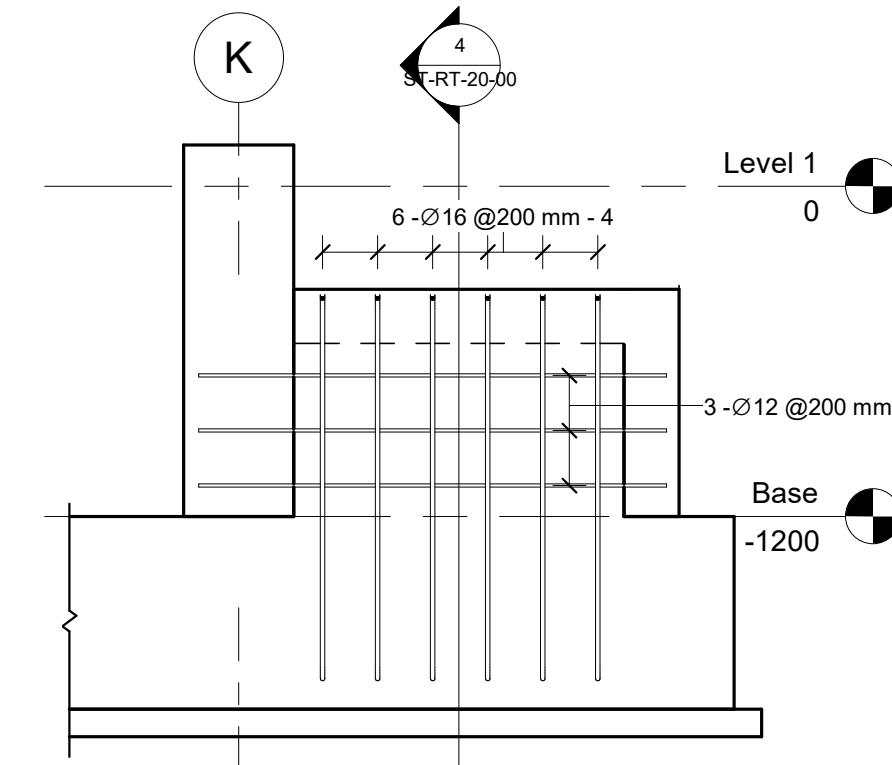
ST-RT-19-00



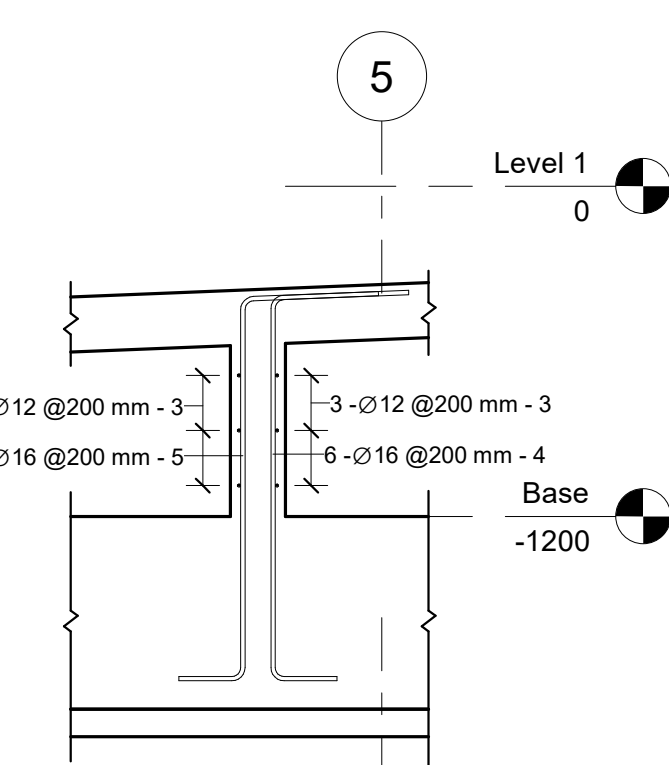
1 W21
1 : 25



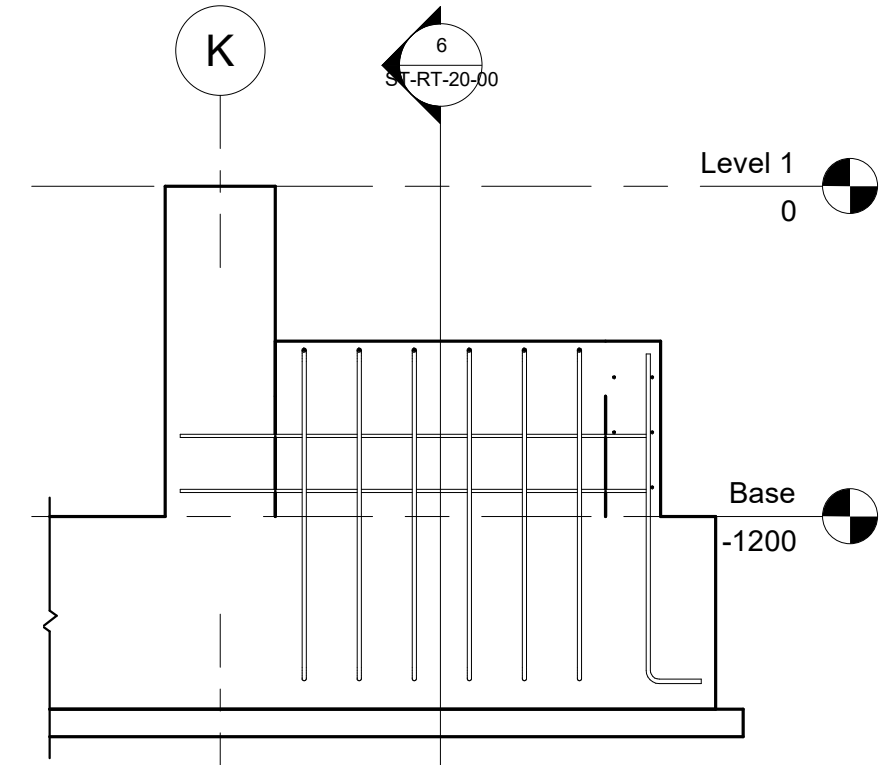
2 W21(Section)
1 : 25



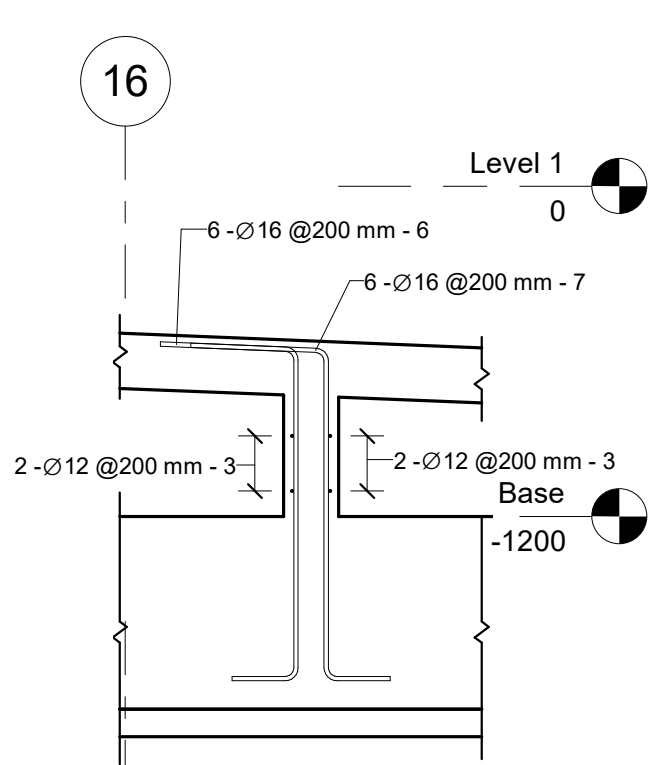
3 W22
1 : 25



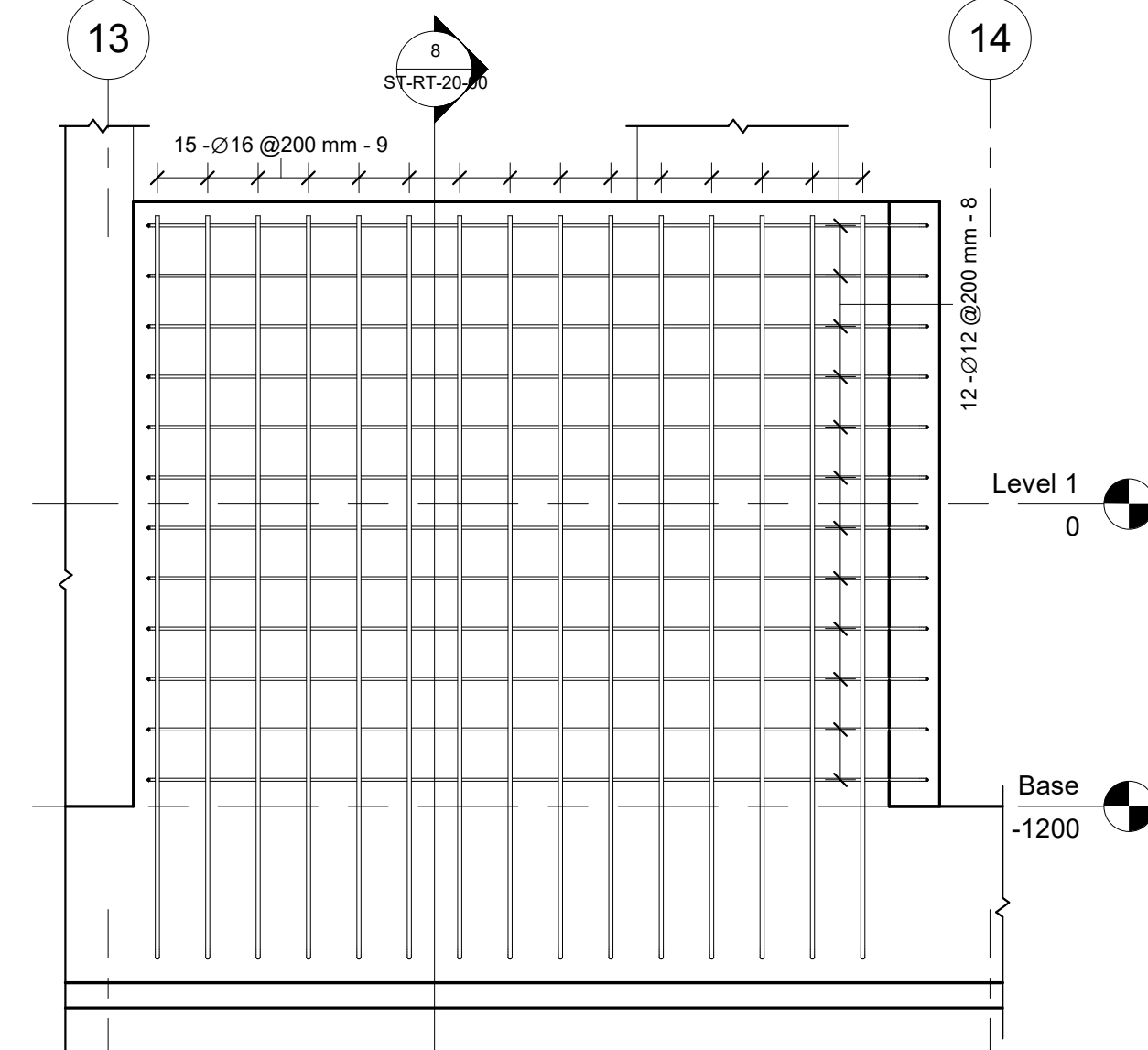
4 W22(Section)
1 : 25



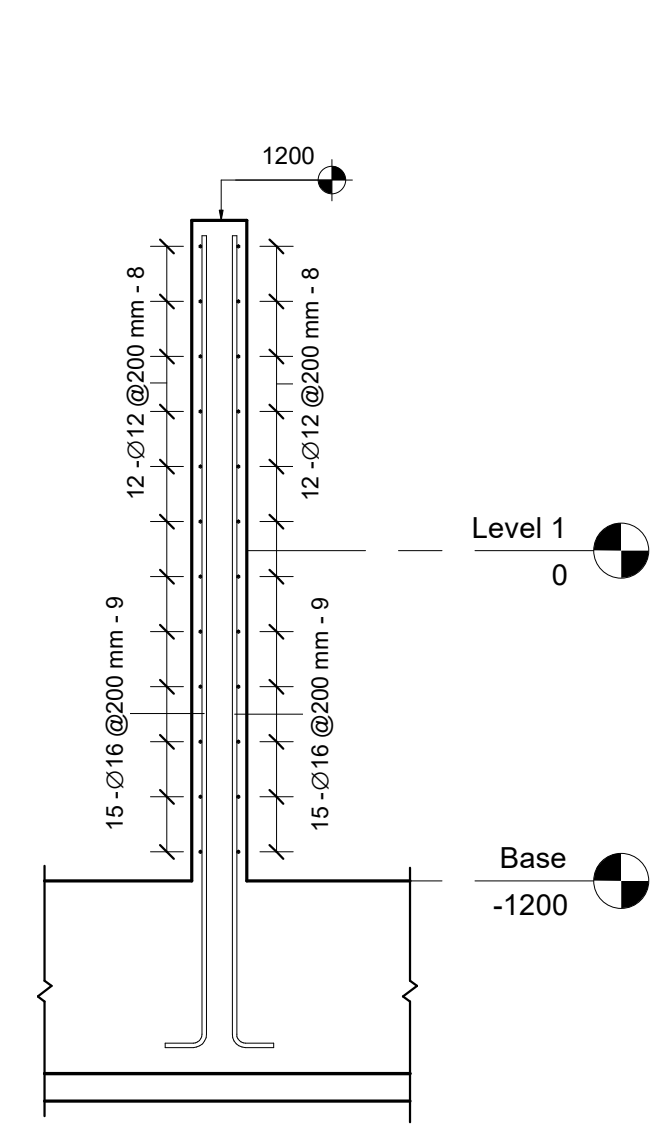
5 W23
1 : 25



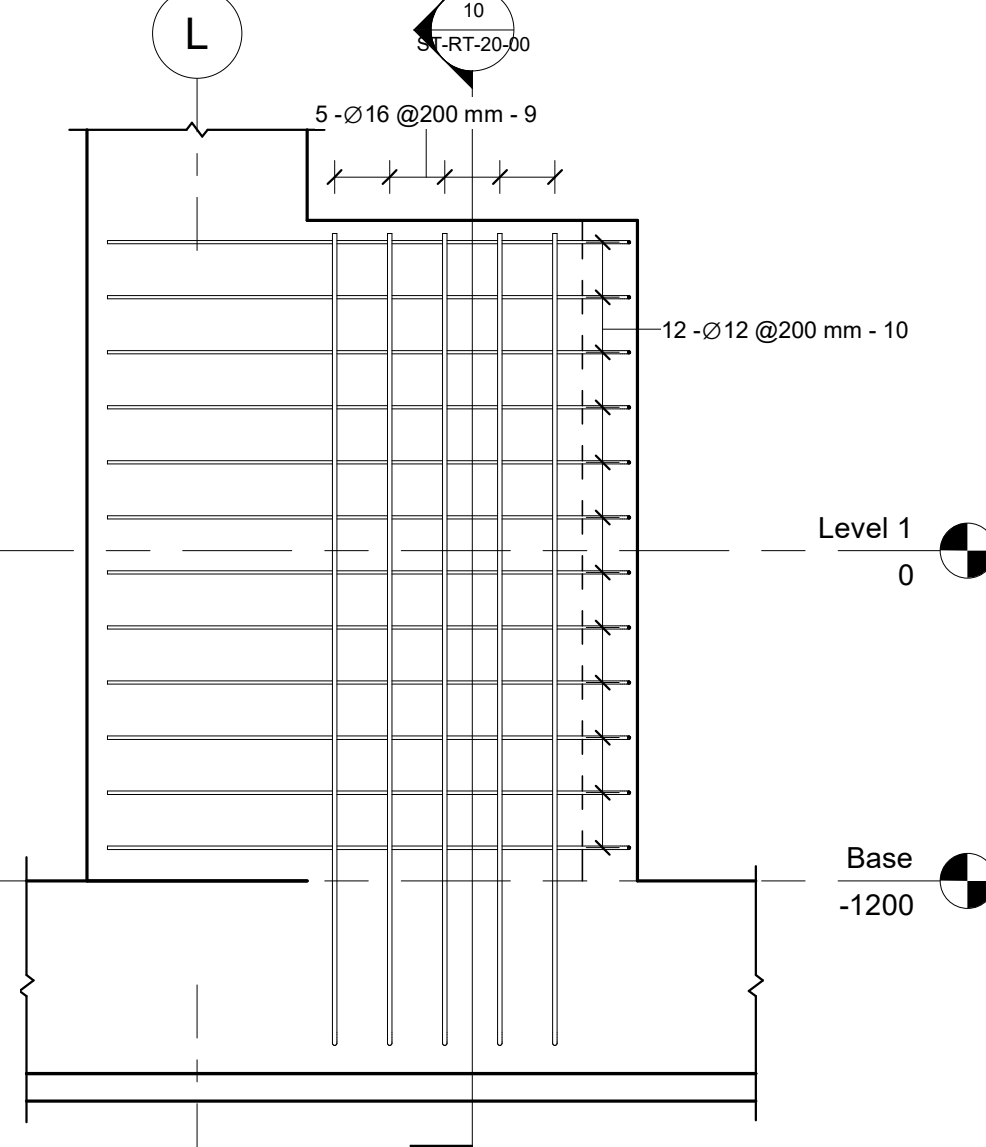
6 W23(Section)
1 : 25



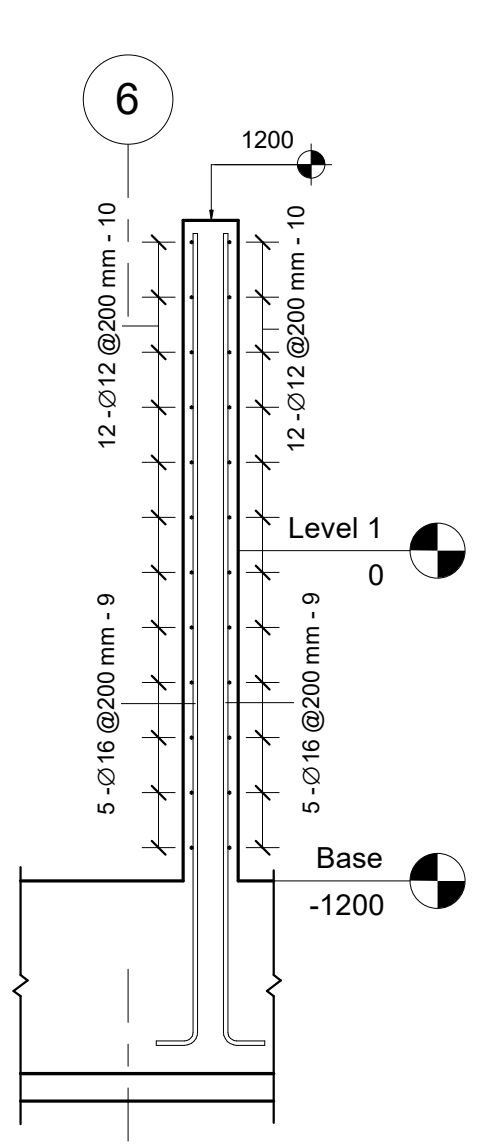
7 W24
1 : 25



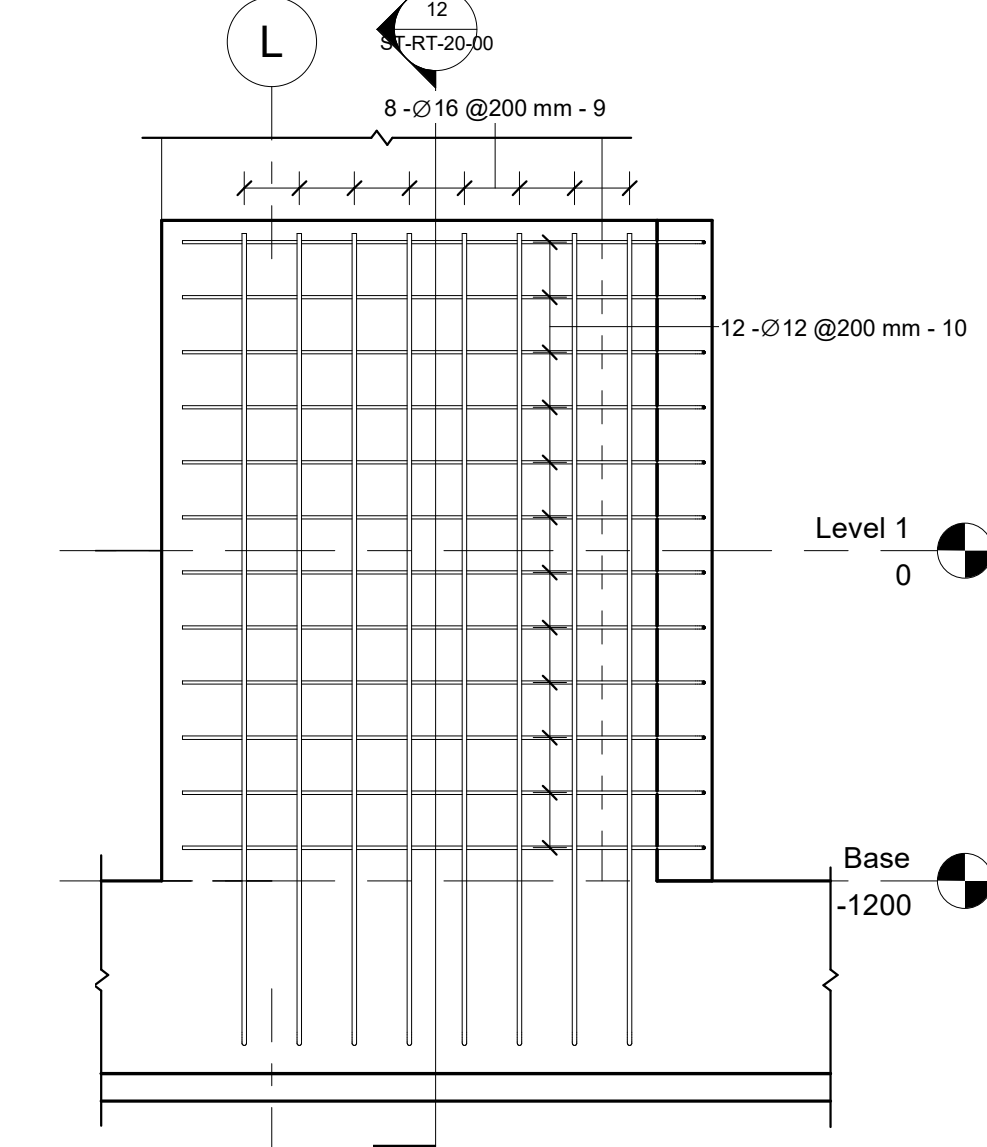
8 W24(Section)
1 : 25



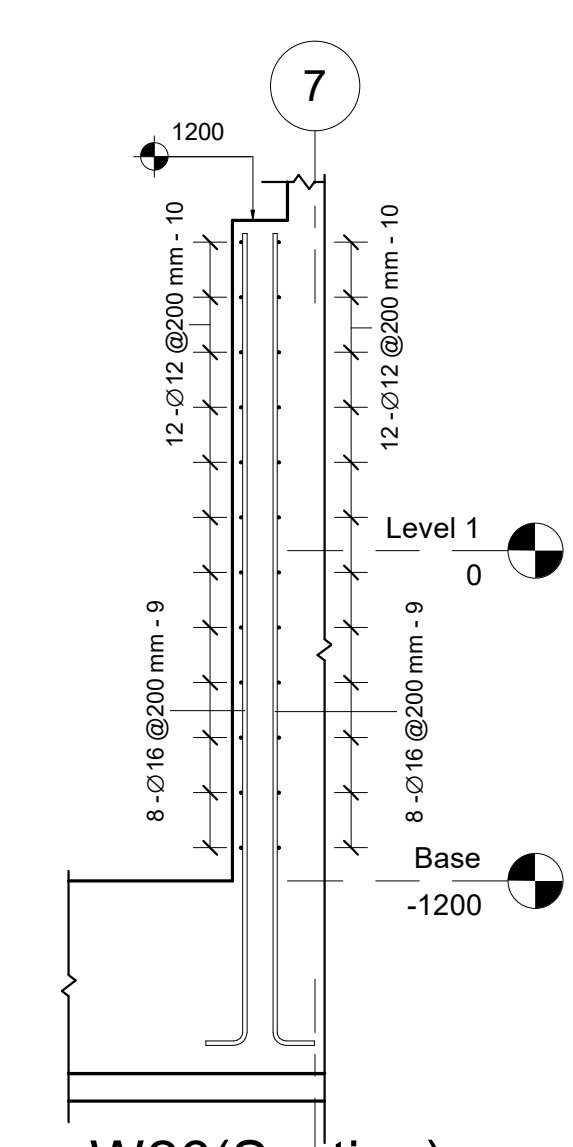
9 W25
1 : 25



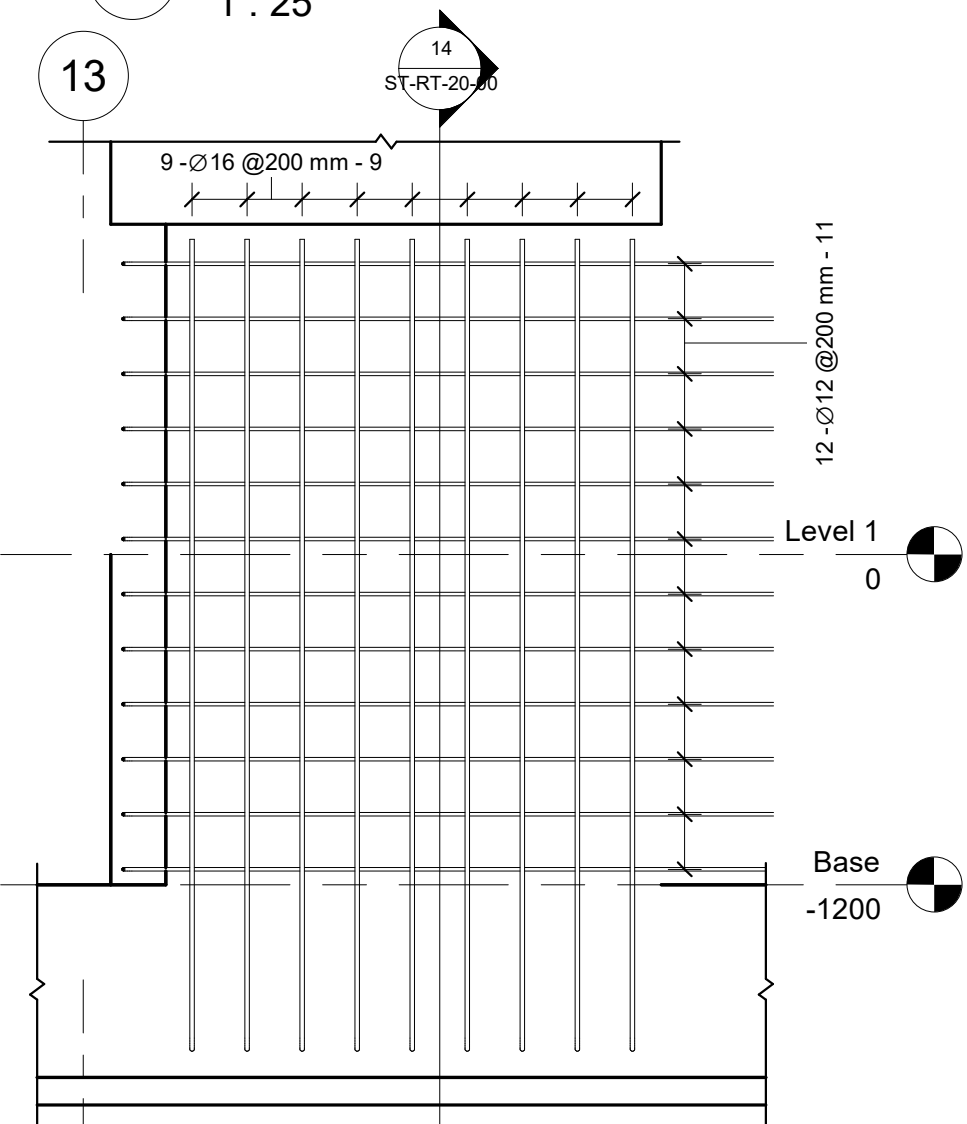
10 W25(Section)
1 : 25



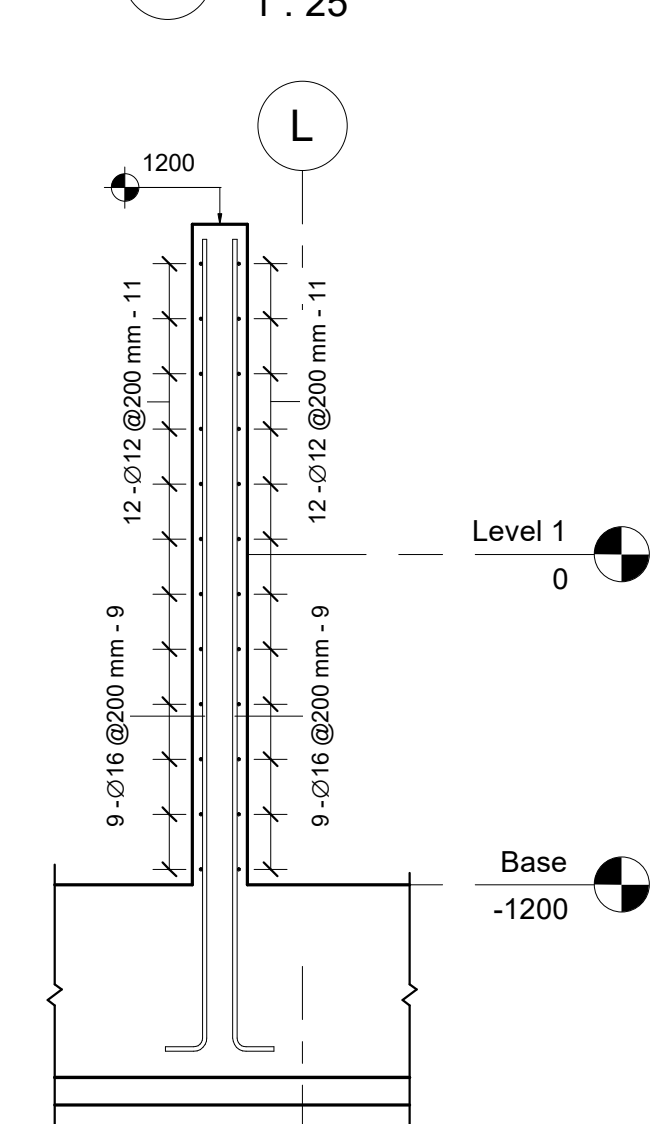
11 W26
1 : 25



12 W26(Section)
1 : 25



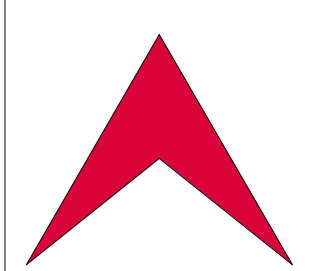
13 W27
1 : 25



14 W27(Section)
1 : 25

Wall W21 to W23 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
1	16 mm	6	2260 mm	14 m	500 mm	1590 mm	240 mm	21	43	
2	16 mm	6	2260 mm	14 m	500 mm	1580 mm	240 mm	21	43	
3	12 mm	18	1700 mm	31 m	1700 mm	0 mm	0 mm	27	54	
4	16 mm	6	2080 mm	12 m	500 mm	1400 mm	240 mm	20	39	
5	16 mm	6	2070 mm	12 m	500 mm	1390 mm	240 mm	20	39	
6	16 mm	6	1890 mm	11 m	500 mm	1210 mm	240 mm	18	36	
7	16 mm	6	1880 mm	11 m	500 mm	1210 mm	240 mm	18	36	
		54			105 m			145	290	

Wall W24 to W27 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls	Image
8	12 mm	24	4050 mm	97 m	500 mm	3100 mm	500 mm	86	173	
9	16 mm	74	3070 mm	227 m	150 mm	2950 mm	0 mm	359	717	
10	12 mm	48	2380 mm	114 m	500 mm	1900 mm	0 mm	101	203	
11	12 mm	24	2980 mm	72 m	500 mm	2500 mm	0 mm	63	127	
		170			510 m			610	1220	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

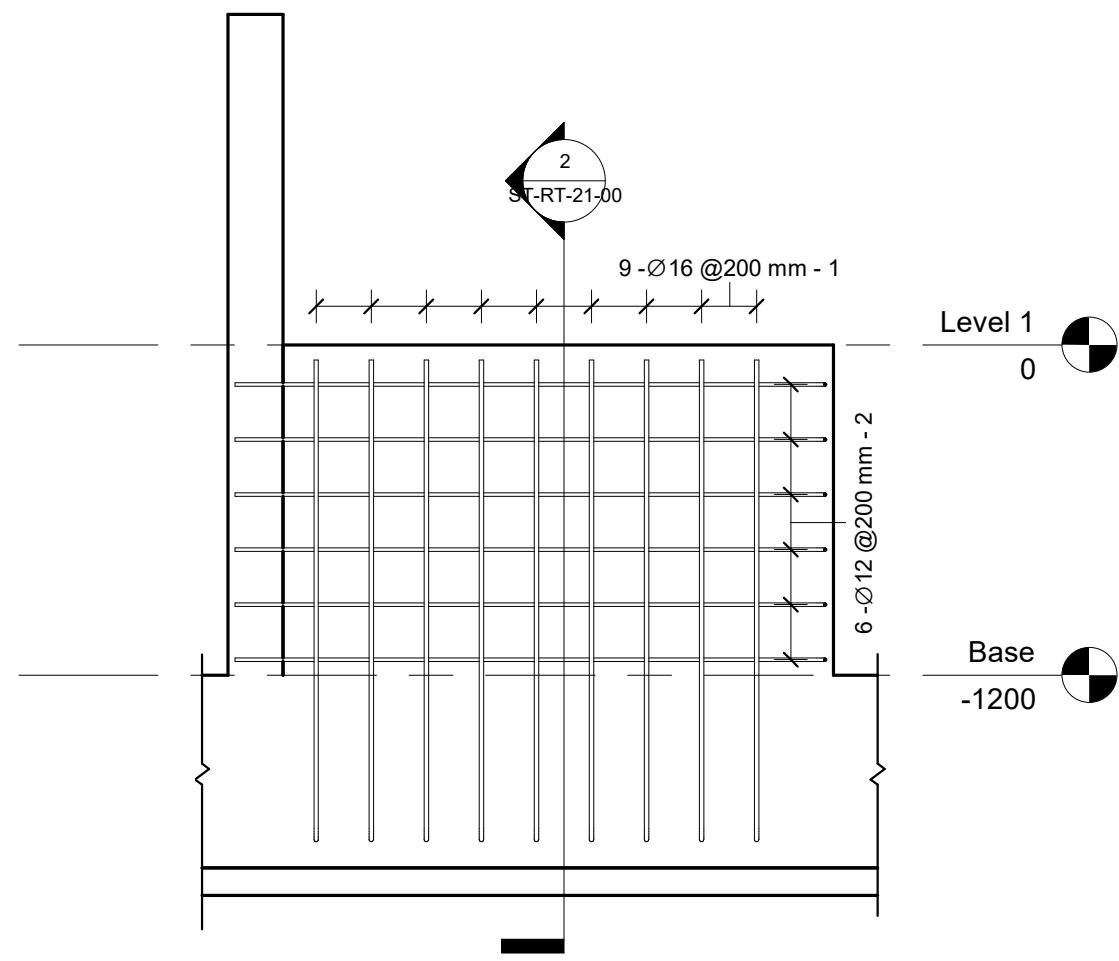
البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

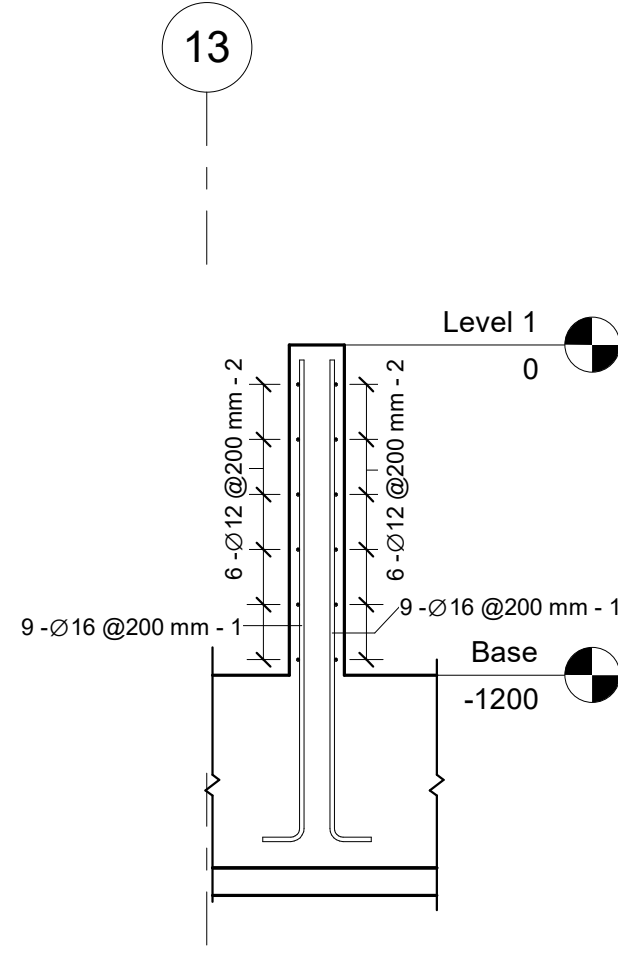


Rev.	AMENDMENT	DATE

Court of Benghazi North Benghazi Walls W21 to W27 Reinforcement		ST-RT-20-00
SCALE:	1 : 25	
DESIGNED:	Refaat Elburki	
DRAWN:	Awad Edrees	
DATE:		February 2021

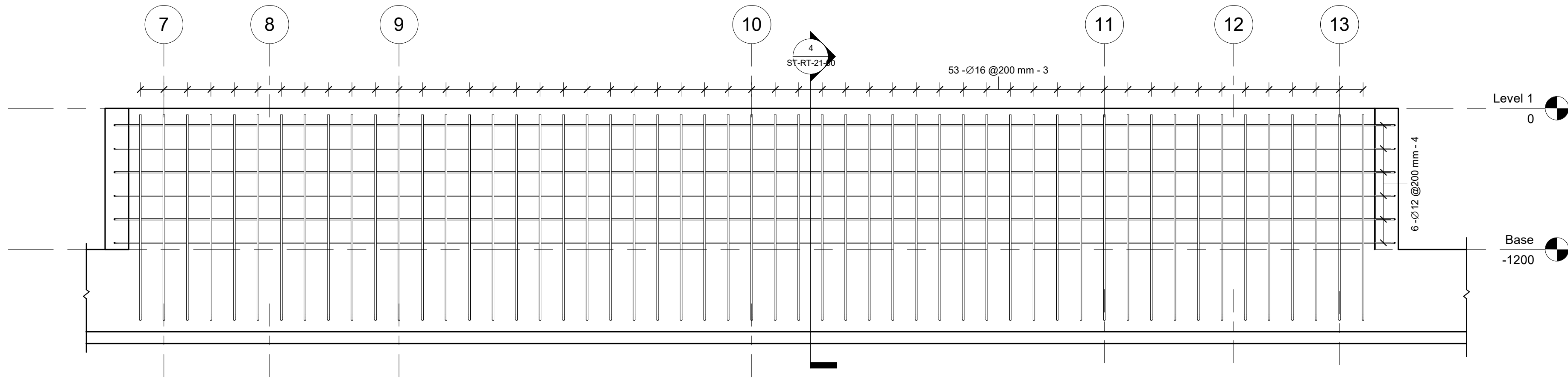


1 W28
1 : 25

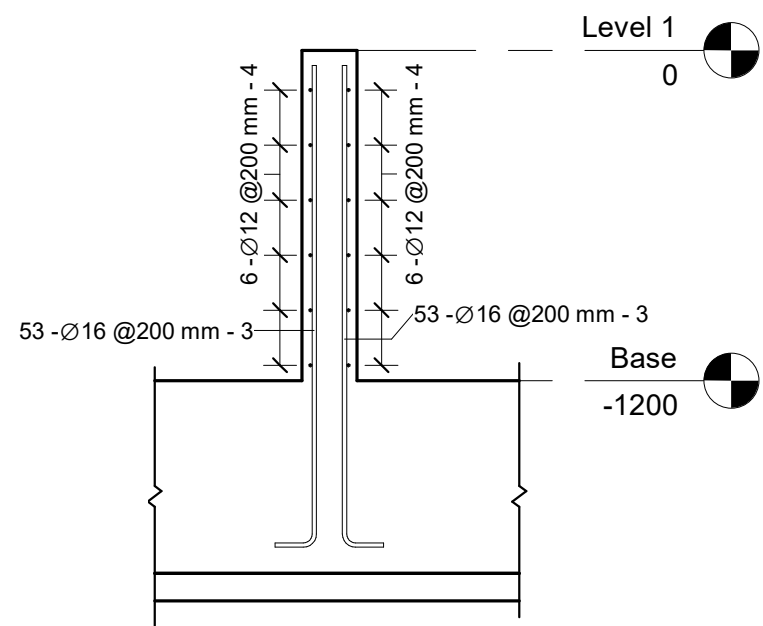


2 W28(Section)
1 : 25

Wall W28 Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Walls
1	16 mm	18	1870 mm	34 m	150 mm	1750 mm	0 mm	53	106
2	12 mm	12	2630 mm	32 m	500 mm	2150 mm	0 mm	28	56
		30	65 m				81	162	

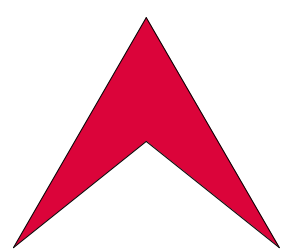


3 W29
1 : 25



4 W29(Section)
1 : 25

Wall W29 Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Image
3	16 mm	106	1870 mm	198 m	150 mm	1750 mm	0 mm	313	
4	12 mm	12	11850 mm	142 m	500 mm	10900 mm	500 mm	126	
		118	340 m				439		



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Walls W28 and W29 Reinforcement

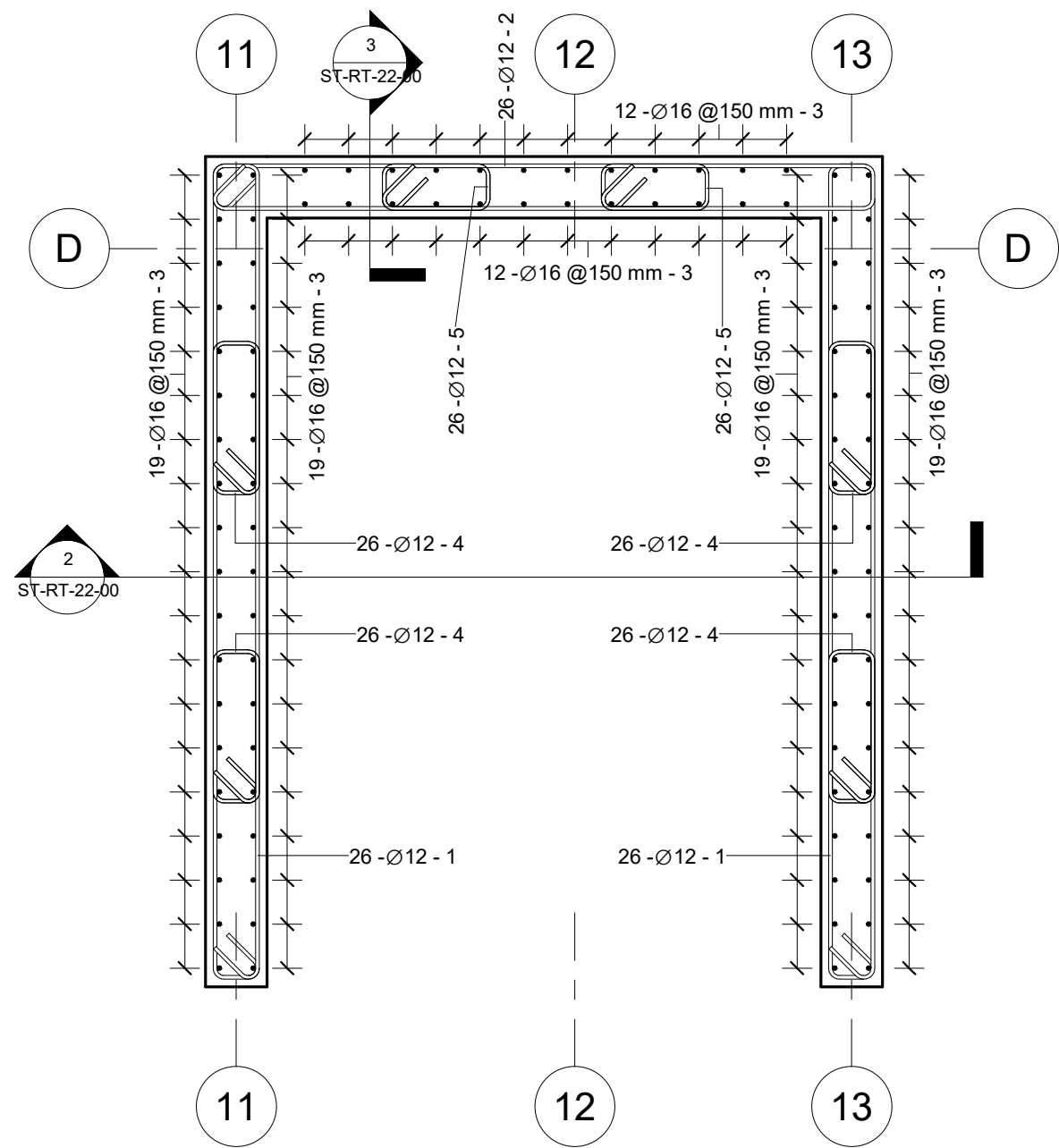
SCALE: 1 : 25

DESIGNED: Refaat Elburki

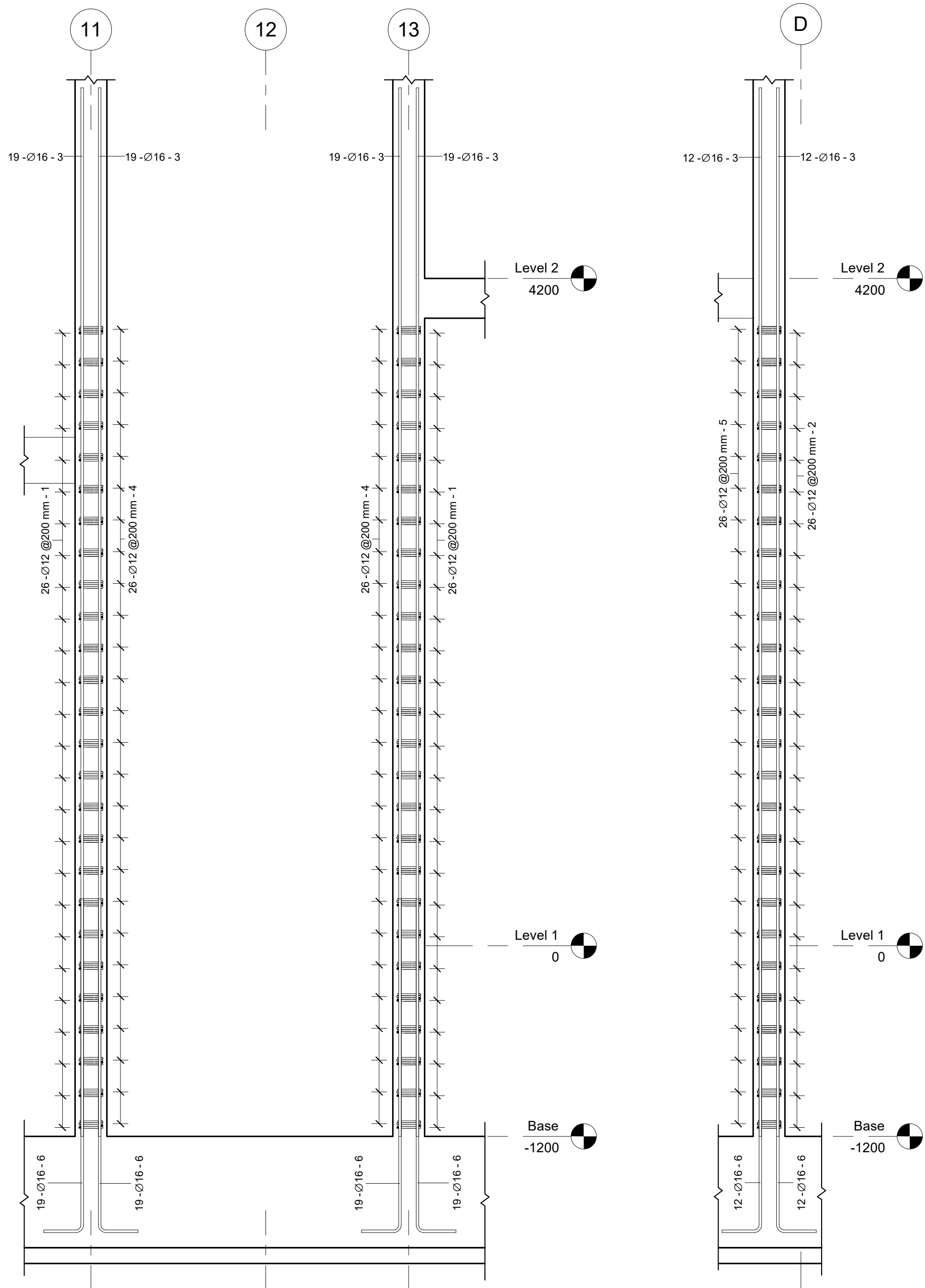
DRAWN: Awad Edrees

DATE: February 2021

ST-RT-21-00



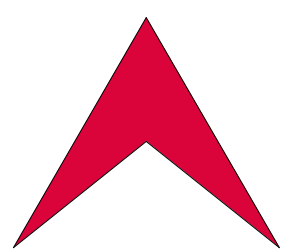
WG1 & WG2
1 : 20



WG1 & WG2(Section1)
1 : 20

WG1 & WG2(Section2)
1 : 20

Walls WG1&WG2 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Walls
1	12 mm	52	5840 mm	304 m	150 mm	2650 mm	160 mm	160 mm	270	539
2	12 mm	26	4840 mm	126 m	150 mm	2150 mm	160 mm	160 mm	112	223
3	16 mm	100	6600 mm	660 m	6600 mm	0 mm	0 mm	0 mm	1042	2083
4	12 mm	208	1540 mm	320 m	150 mm	500 mm	160 mm	160 mm	284	569
5	12 mm	104	1240 mm	129 m	150 mm	350 mm	160 mm	160 mm	114	229
6	16 mm	100	2320 mm	232 m	250 mm	2100 mm	0 mm	0 mm	366	732
		590		1771 m					2188	4376



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

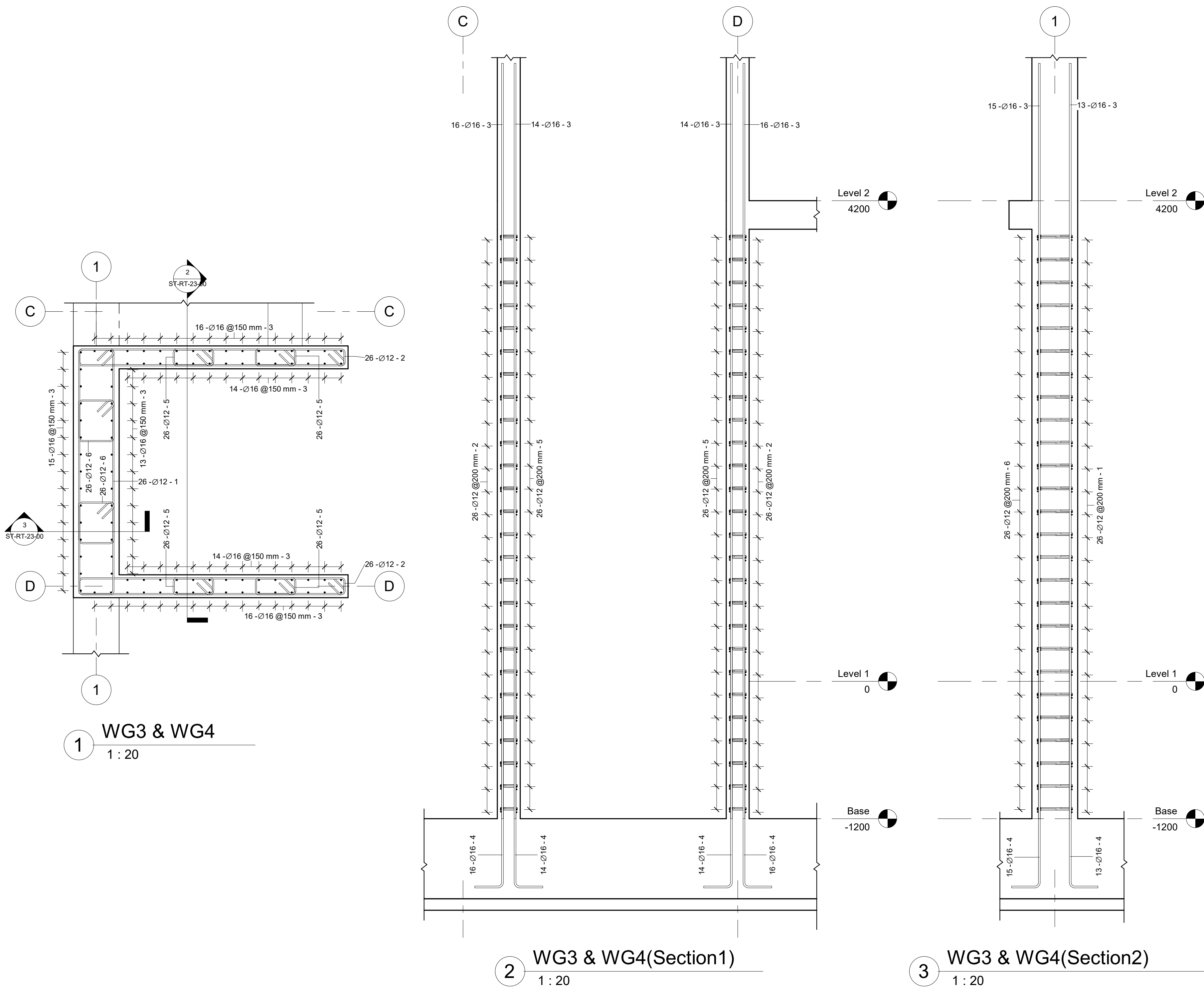
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Walls WG1&WG2 Reinforcement

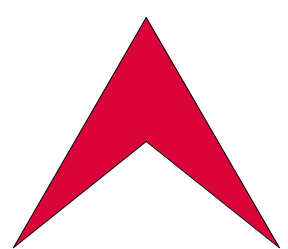
SCALE: 1 : 20
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

DATE: February 2021

ST-RT-22-00



Walls WG3&WG4 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Walls
1	12 mm	26	5160 mm	134 m	2150 mm	310 mm	160 mm	160 mm	119	238
2	12 mm	52	5200 mm	270 m	2330 mm	150 mm	160 mm	160 mm	240	480
3	16 mm	88	6600 mm	581 m	6600 mm	0 mm	0 mm	0 mm	917	1833
4	16 mm	88	2320 mm	204 m	2100 mm	250 mm	0 mm	0 mm	322	644
5	12 mm	104	1250 mm	130 m	360 mm	150 mm	160 mm	160 mm	115	231
6	12 mm	52	1600 mm	83 m	370 mm	310 mm	160 mm	160 mm	74	148
		410		1403 m					1787	3575



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Walls WG3&WG4 Reinforcement

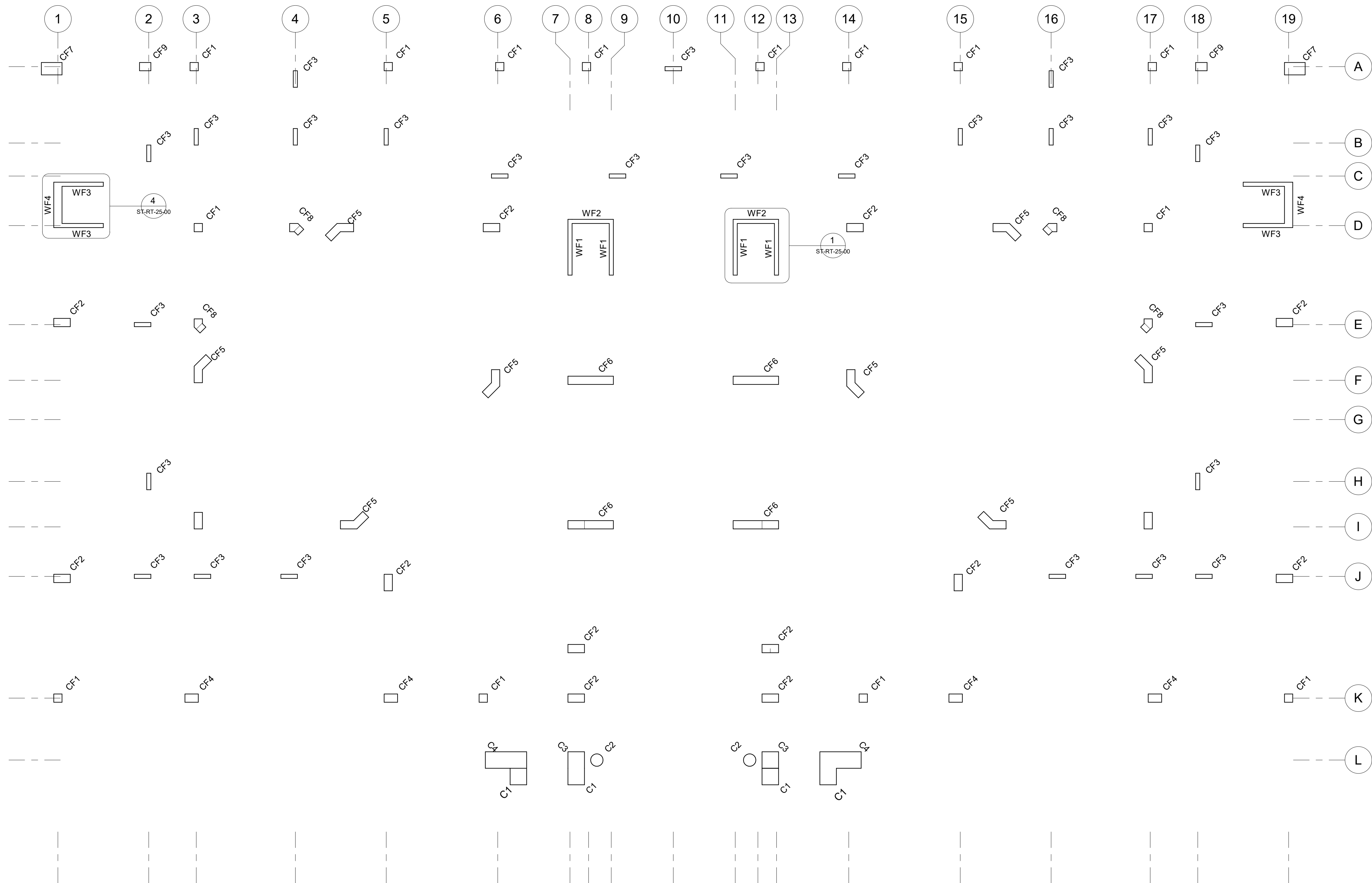
SCALE: 1 : 20

DESIGNED: Refaat Elburki

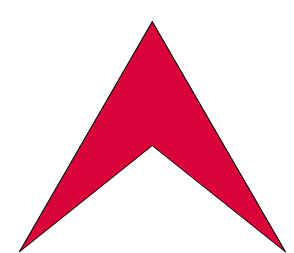
DRAWN: Awad Edrees

DATE: February 2021

ST-RT-23-00



1 First Floor Walls Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

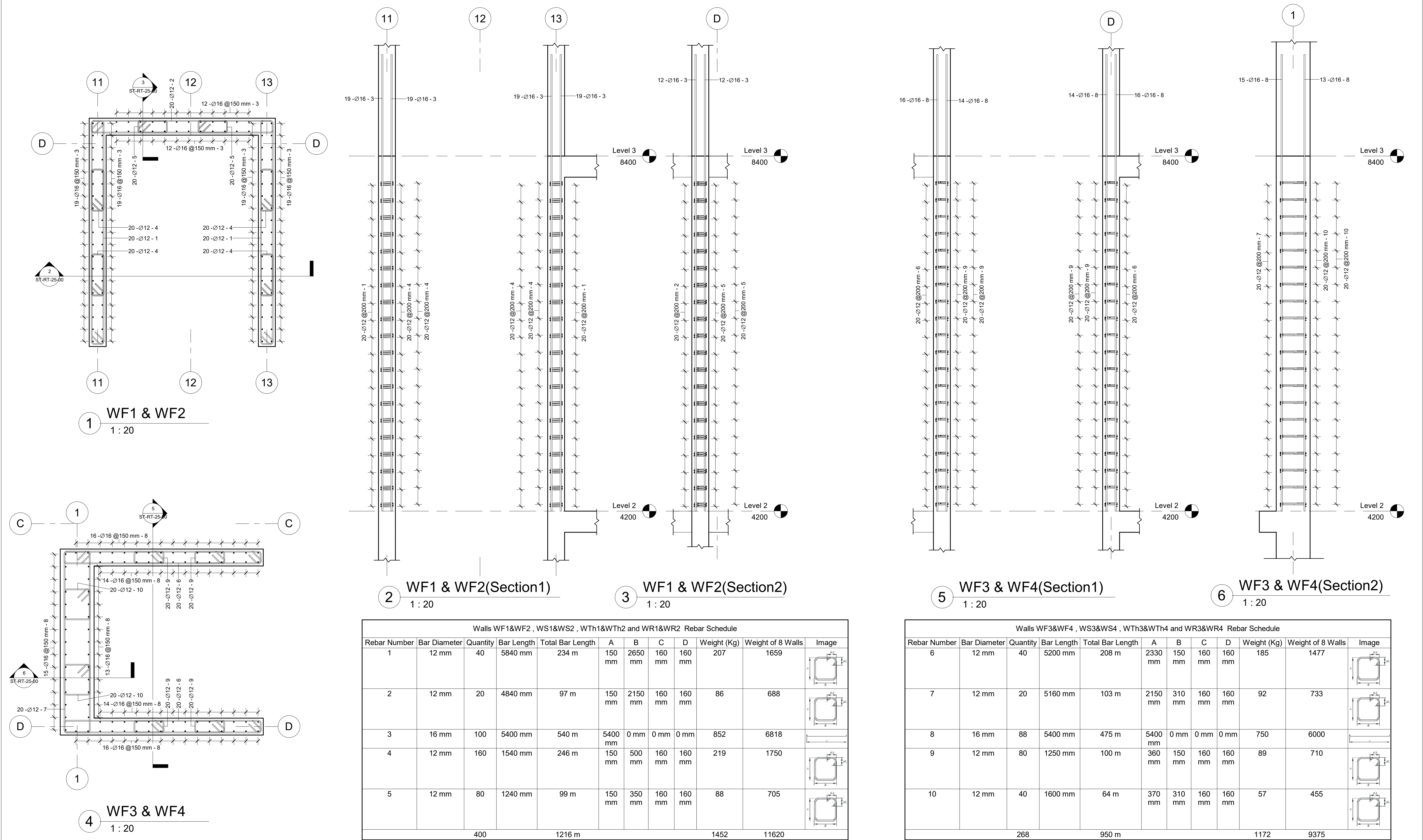
Rev.	AMENDMENT	DATE

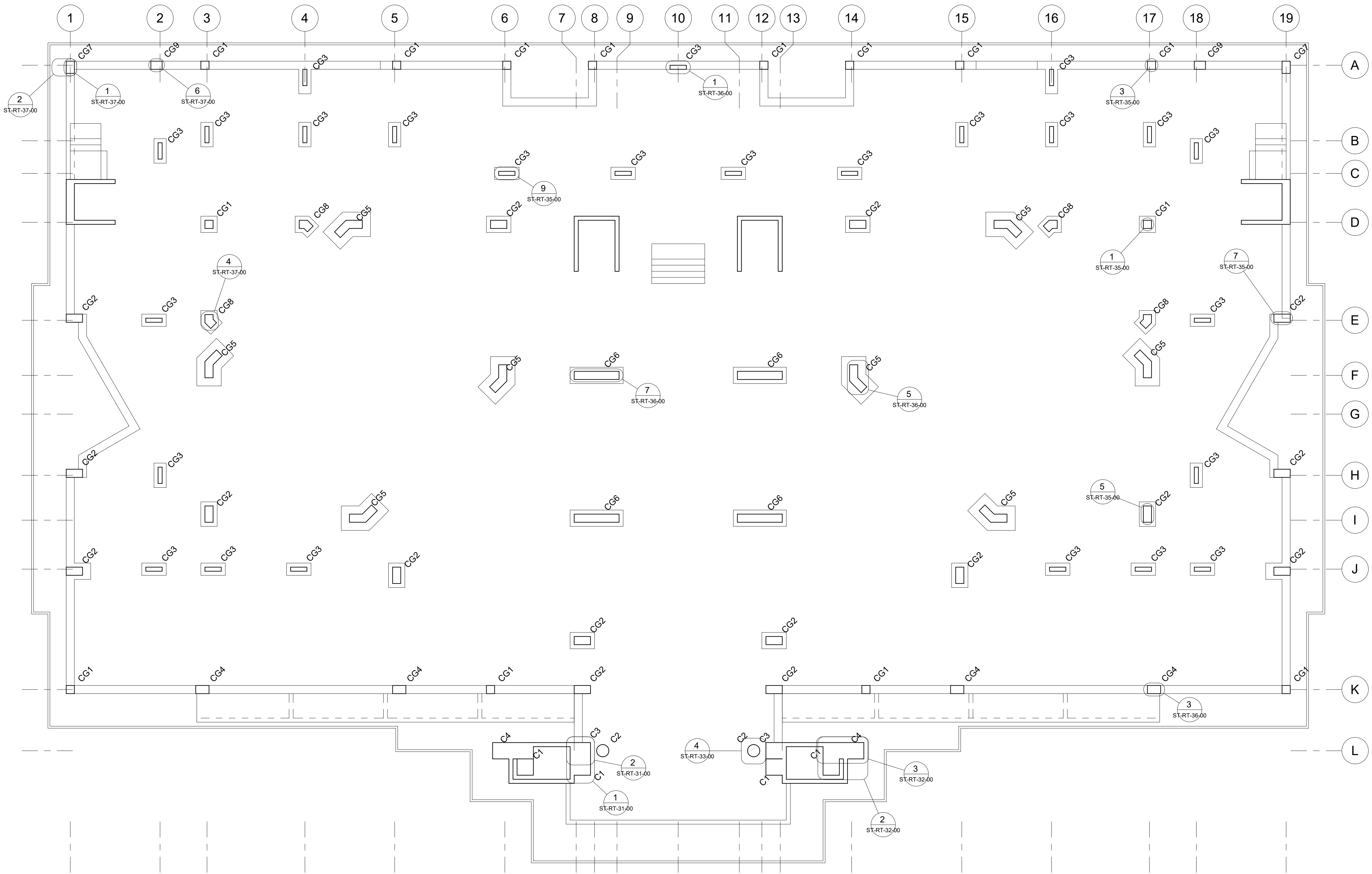
Court of Benghazi North
Benghazi
First Floor to Roof Elevator Walls Layout

SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

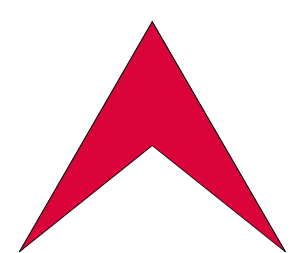
DATE: February 2021

ST-RT-24-00





1 Ground Floor Columns Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

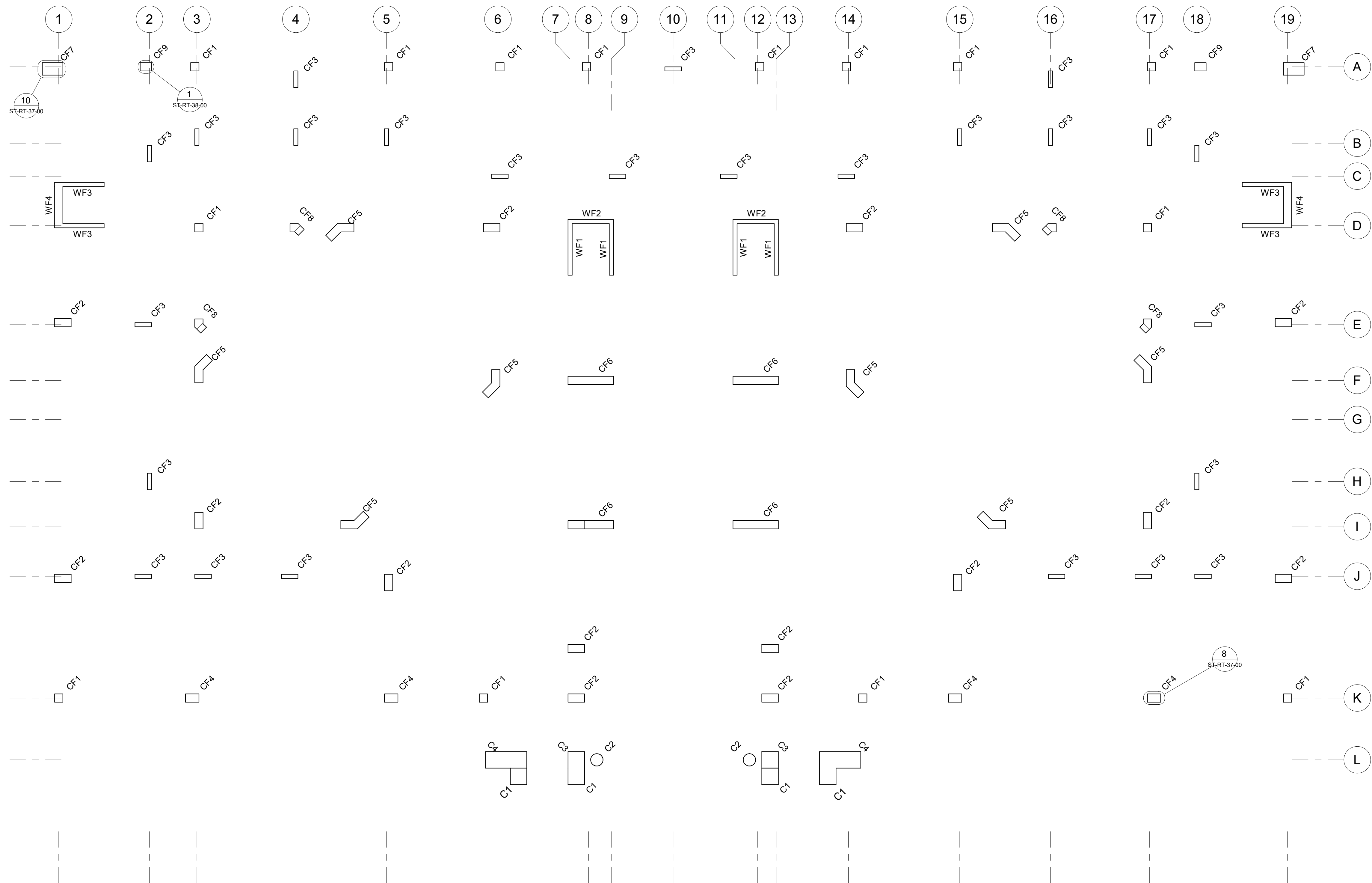
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Ground Floor Columns Layout

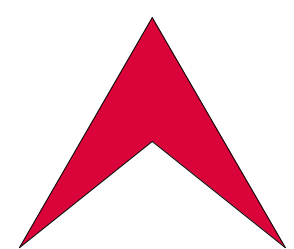
SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

DATE: February 2021

ST-RT-26-00



1 First Floor Columns Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

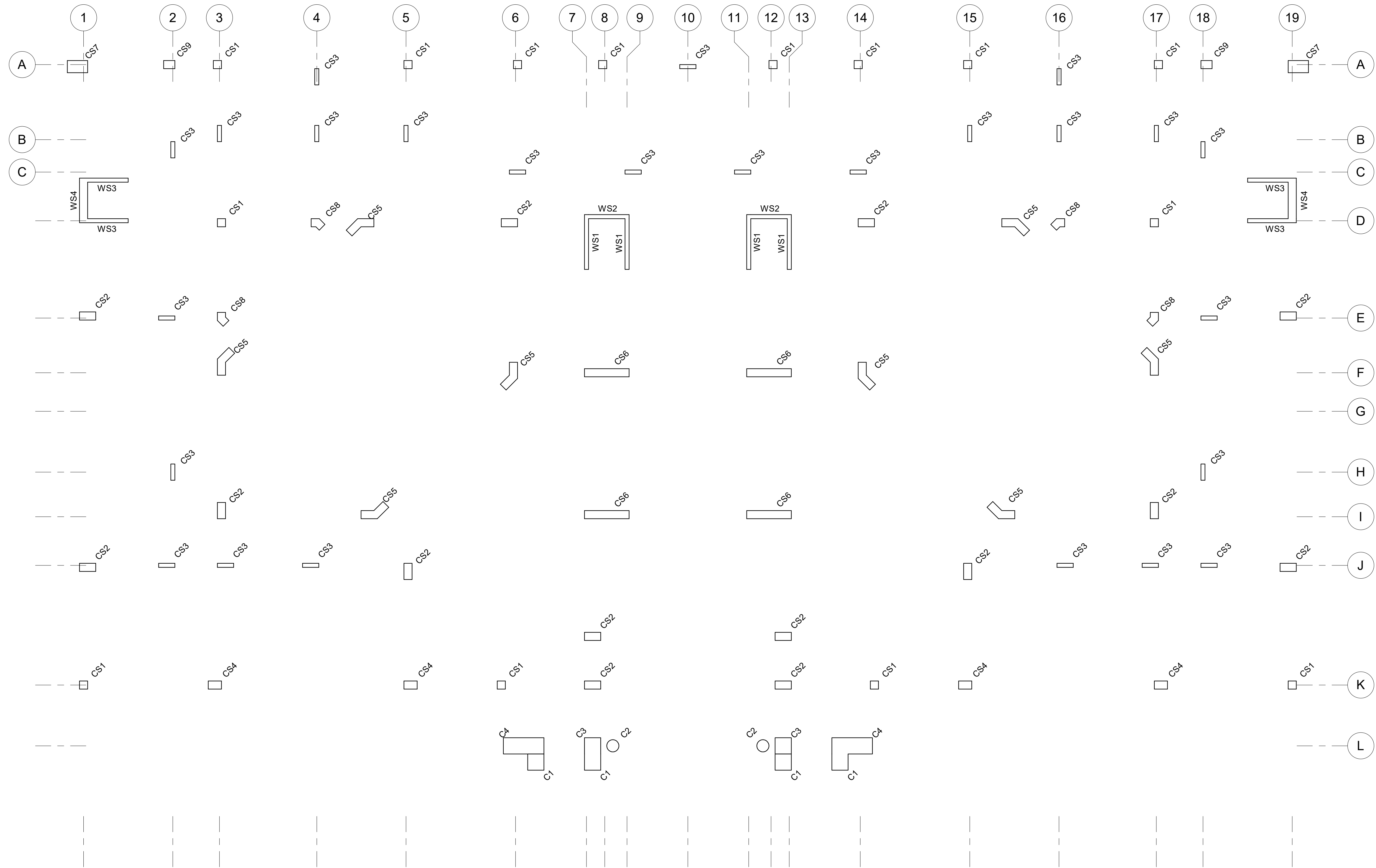
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
First Floor Columns Layout

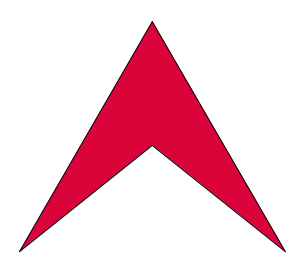
SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

DATE: February 2021

ST-RT-27-00



1 Second Floor Columns Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

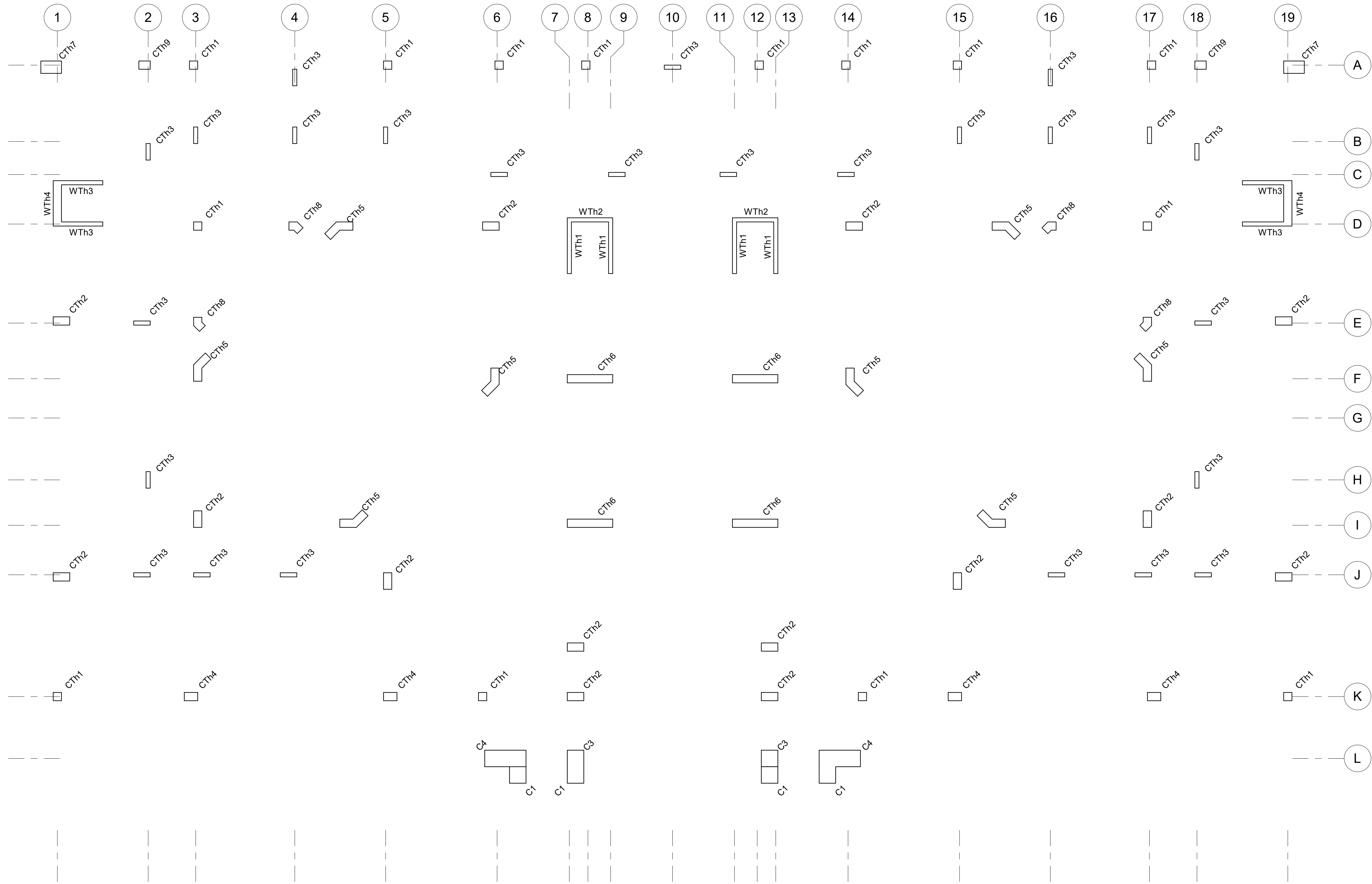
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Second Floor Columns Layout

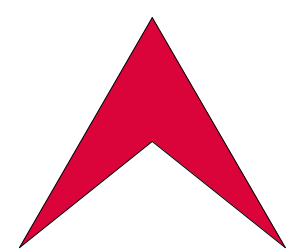
SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

DATE: February 2021

ST-RT-28-00



1 Third Floor Columns Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka البركة
Jamal Abdunnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Third Floor Columns Layout

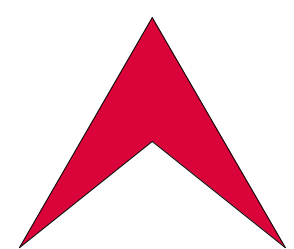
SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

DATE: February 2021

ST-RT-29-00



1 Roof Columns Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka البركة
Jamal Abdalnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



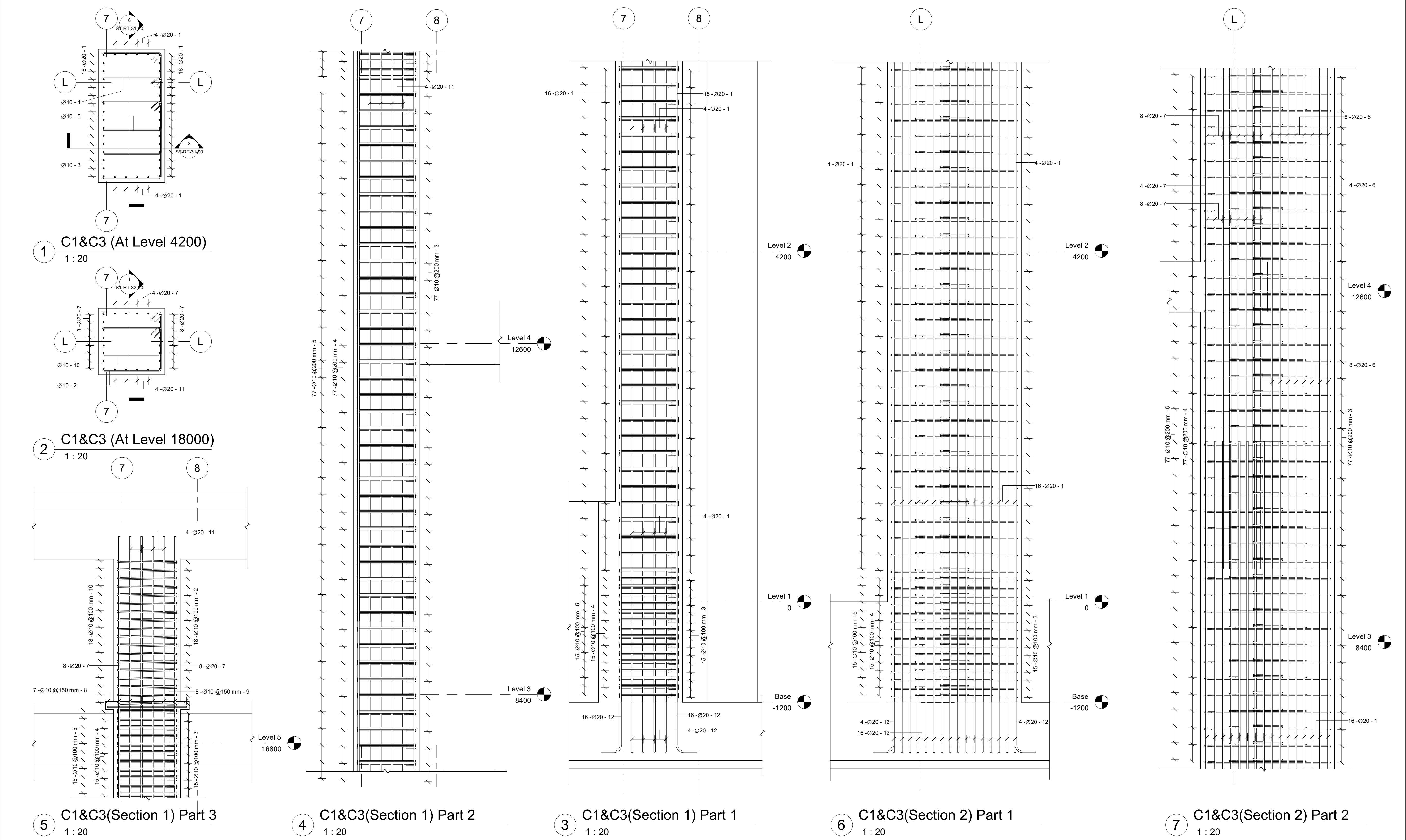
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Roof Columns Layout

ST-RT-30-00

SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



	L Libyan C Center E For Engineering C Consultancy Certified From Autodesk	AL-baraka البركة Jamal Abdalnasser st. شارع جمال عبد الناصر Noaman Tower برج النعمان Benghazi-Libya بنغازي-ليبيا LCEC@mail.com Mobile +218 92 512 3567 Mobile +218 91 857 1229		شركة اهل الثقة للمقاولات العامة ليبيا - بنغازي الفويهاة الغربية شارع العامرية	Rev.	AMENDMENT	DATE	Court of Benghazi North Benghazi Columns Reinforcement (1)		ST-RT-31-00
								SCALE: 1 : 20	DATE: February 2021	
								DESIGNED: Refaat Elburki		
								DRAWN: Awad Edrees		

1 C1&C3(Section 2) Part 3
1 : 20

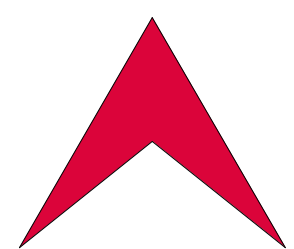
2 C1&C4 (At Level 4200)
1 : 20

6 C1&C4(Section 1) Part 3
1 : 20

3 C1&C4 (At Level 18000)
1 : 20

4 C1&C4(Section 1) Part 1
1 : 20

5 C1&C4(Section 1) Part 2
1 : 20



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka البركة
Jamal Abdunnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

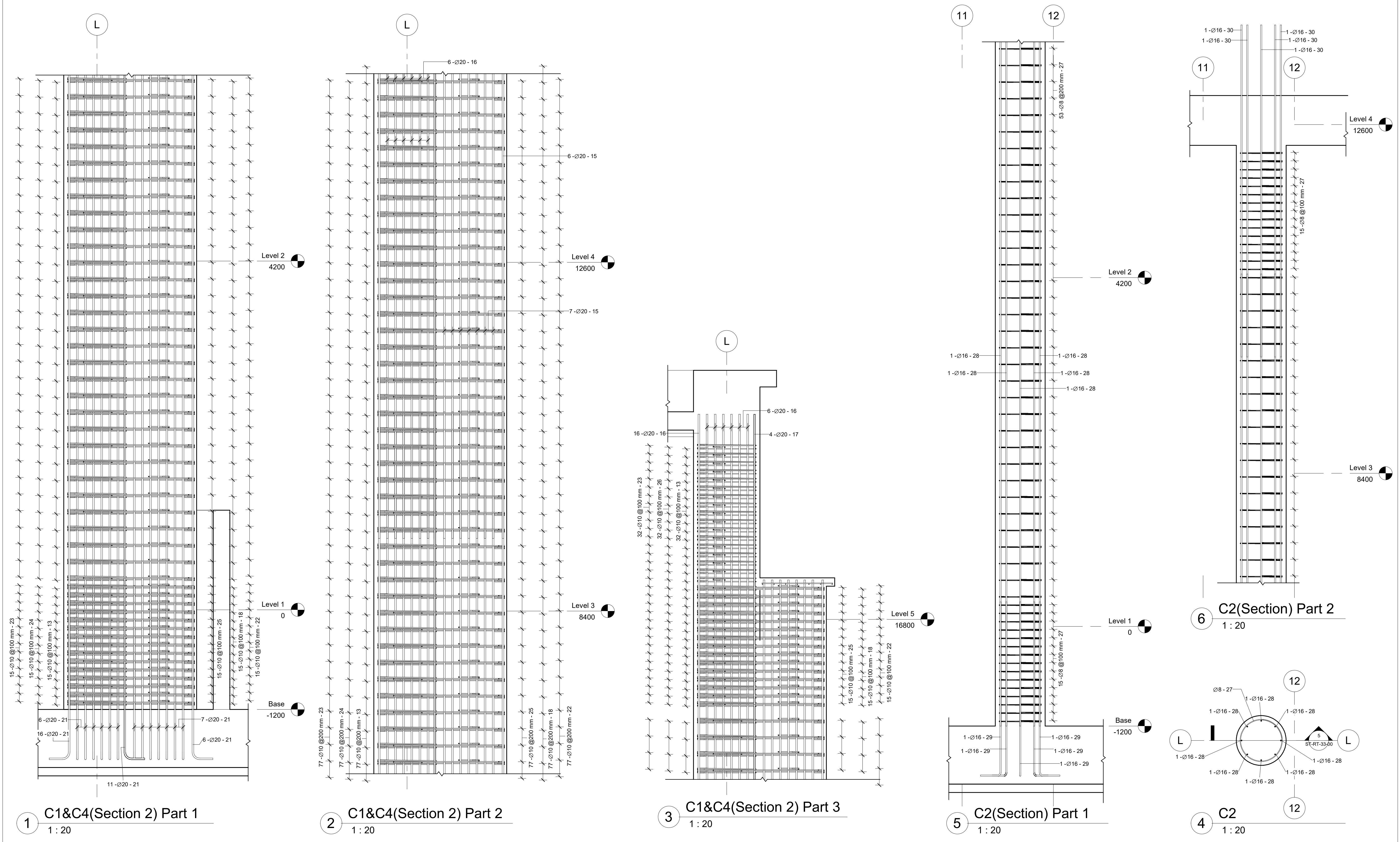
[illegible]

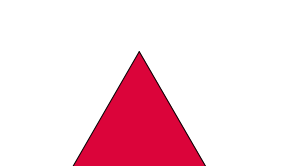
Court of Benghazi North
Benghazi
Columns Reinforcement (2)

SCALE:	1 : 20
DESIGNED:	Refaat Elburk
DRAWN:	Awad Edrees

DATE: February 2021

ST-RT-32-00

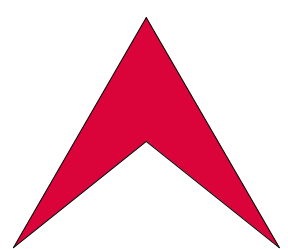


 L Libyan C Center E For Engineering C Consultancy Certified From Autodesk	AL-baraka Jamal Abdalnasser st. Noaman Tower Benghazi-Libya LCEC@mail.com Mobile +218 92 512 3567 Mobile +218 91 857 1229	البركة شارع جمال عبد الناصر برج النعمان بنغازي-ليبيا	 شركة اهل الثقة للمقاولات العامة ليبيا - بنغازي الفويهاات الغربية شارع العامرية	Rev.	AMENDMENT	DATE	Court of Benghazi North Benghazi Columns Reinforcement (3)		ST-RT-33-00
					SCALE:	1 : 20	DATE:	February 2021	
					DESIGNED:	Refaat Elburki			
					DRAWN:	Awad Edrees			

Column C1&C3 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Columns	Image
1	20 mm	40	12000 mm	480 m	12000 mm	0 mm	0 mm	0 mm	1184	2368	
2	10 mm	18	3040 mm	55 m	710 mm	710 mm	130 mm	130 mm	34	67	
3	10 mm	107	4640 mm	496 m	1510 mm	710 mm	130 mm	130 mm	306	612	
4	10 mm	107	3470 mm	371 m	930 mm	710 mm	130 mm	130 mm	229	458	
5	10 mm	184	2320 mm	427 m	350 mm	710 mm	130 mm	130 mm	263	526	
6	20 mm	20	8000 mm	160 m	8000 mm	0 mm	0 mm	0 mm	395	789	
7	20 mm	20	10000 mm	200 m	10000 mm	0 mm	0 mm	0 mm	493	986	
8	10 mm	7	950 mm	7 m	950 mm	0 mm	0 mm	0 mm	4	8	
9	10 mm	8	850 mm	7 m	850 mm	0 mm	0 mm	0 mm	4	8	
10	10 mm	18	2300 mm	41 m	710 mm	340 mm	130 mm	130 mm	26	51	
11	20 mm	4	3500 mm	14 m	3500 mm	0 mm	0 mm	0 mm	35	69	
12	20 mm	40	2300 mm	92 m	2100 mm	250 mm	0 mm	0 mm	227	454	
		573			2350 m			3199			6397

Column C1&C4 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Columns	Image
13	10 mm	124	5440 mm	675 m	710 mm	1910 mm	130 mm	130 mm	416	832	
14	20 mm	60	12000 mm	720 m	12000 mm	0 mm	0 mm	0 mm	1776	3551	
15	20 mm	20	8000 mm	160 m	8000 mm	0 mm	0 mm	0 mm	395	789	
16	20 mm	40	10000 mm	400 m	10000 mm	0 mm	0 mm	0 mm	986	1973	
17	20 mm	4	3500 mm	14 m	3500 mm	0 mm	0 mm	0 mm	35	69	
18	10 mm	107	4720 mm	505 m	1530 mm	730 mm	130 mm	130 mm	311	623	
19	10 mm	7	950 mm	7 m	950 mm	0 mm	0 mm	0 mm	4	8	
20	10 mm	8	850 mm	7 m	850 mm	0 mm	0 mm	0 mm	4	8	
21	20 mm	60	2300 mm	138 m	2100 mm	250 mm	0 mm	0 mm	340	681	
22	10 mm	107	2160 mm	231 m	250 mm	730 mm	130 mm	130 mm	142	285	
23	10 mm	140	2500 mm	350 m	710 mm	440 mm	130 mm	130 mm	216	432	
24	10 mm	92	4710 mm	433 m	350 mm	1910 mm	130 mm	130 mm	267	534	
25	10 mm	107	4170 mm	446 m	1530 mm	460 mm	130 mm	130 mm	275	550	
26	10 mm	32	4310 mm	138 m	150 mm	1910 mm	130 mm	130 mm	85	170	
		908			4224 m			5253			10505

Column C2 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Columns	Image
27	8 mm	83	1970 mm	164 m	510 mm	390 mm	0 mm	0 mm	65	129	
28	16 mm	8	12000 mm	96 m	12000 mm	0 mm	0 mm	0 mm	152	303	
29	16 mm	8	2320 mm	19 m	2100 mm	250 mm	0 mm	0 mm	29	59	
30	16 mm	8	4000 mm	32 m	4000 mm	0 mm	0 mm	0 mm	51	101	
		107			310 m			296			592



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



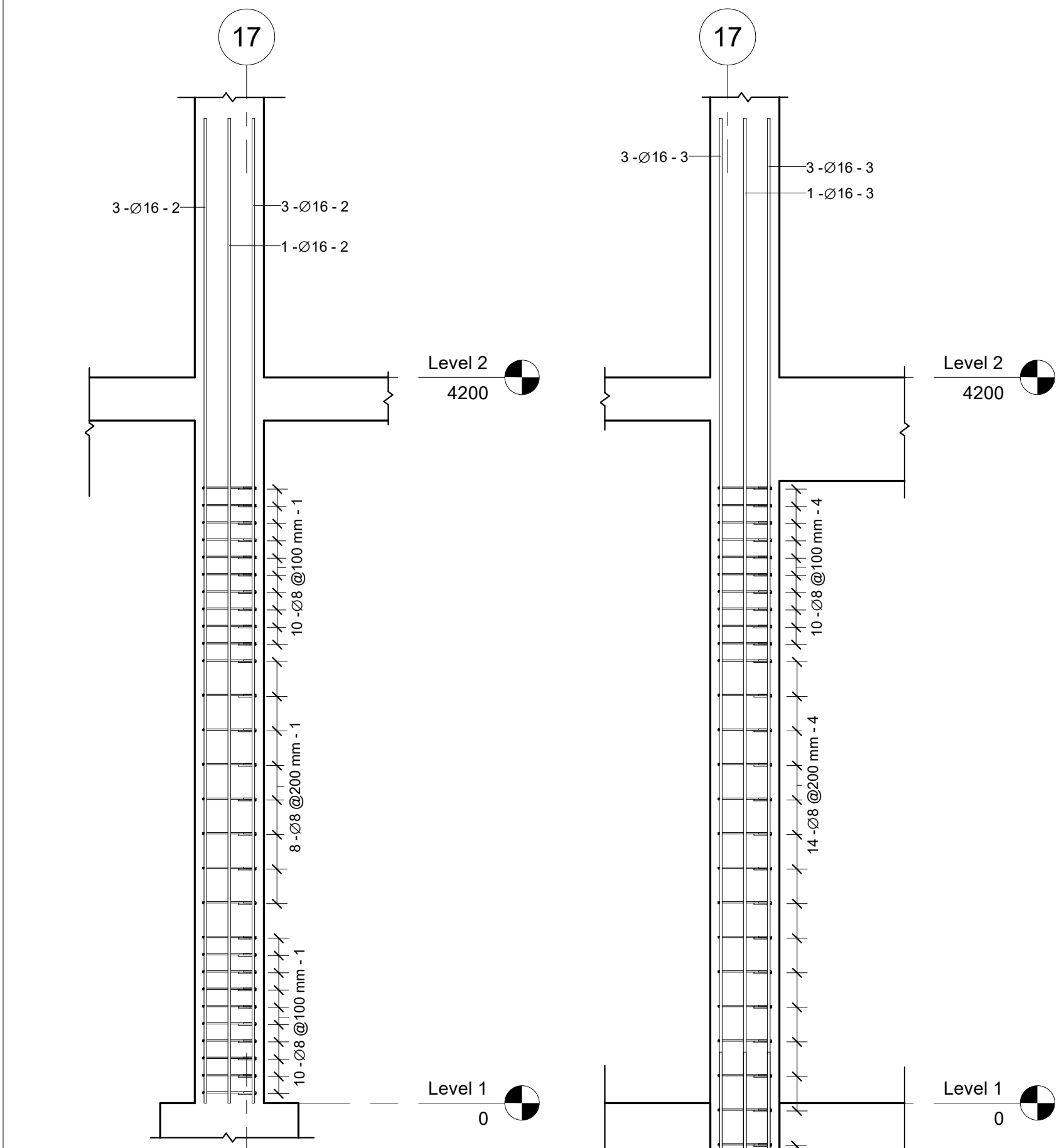
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Columns Reinforcement (4)

SCALE:
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

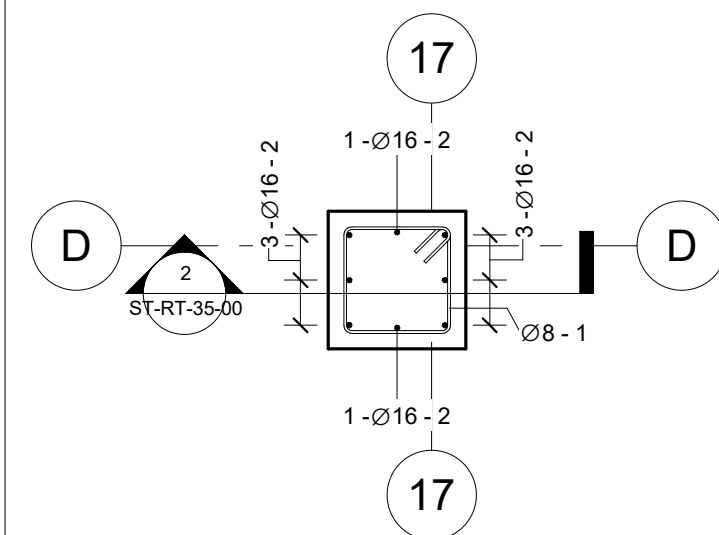
DATE: February 2021

ST-RT-34-00

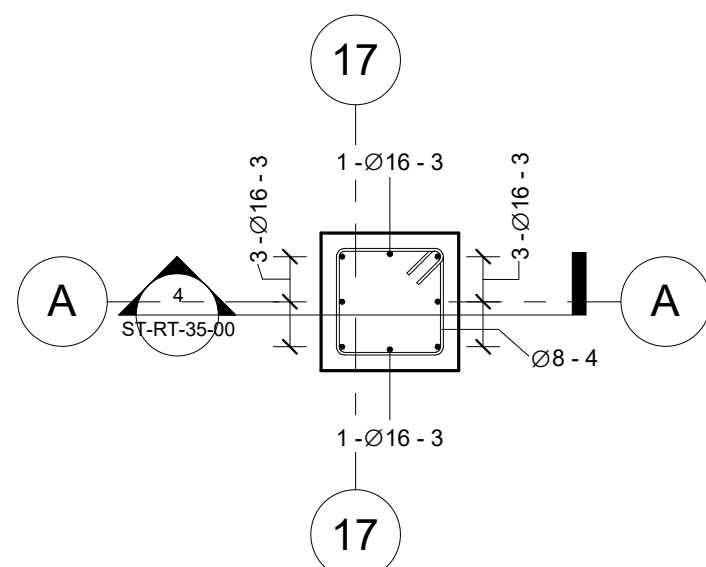


2 CG1 With Pier(Section)
1 : 25

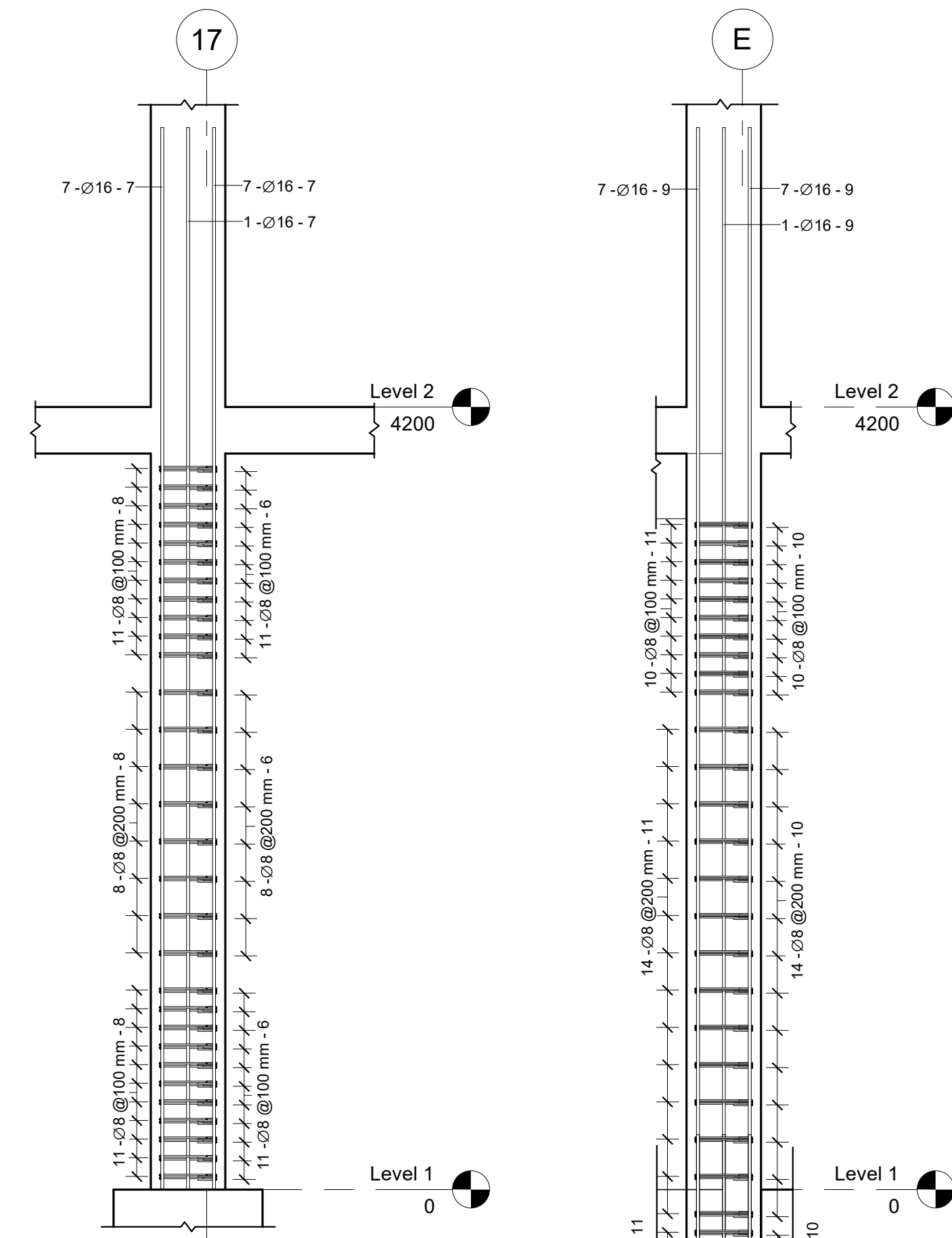
4 CG1 Without Pier(Section)
1 : 25



1 CG1 With Pier
1 : 20

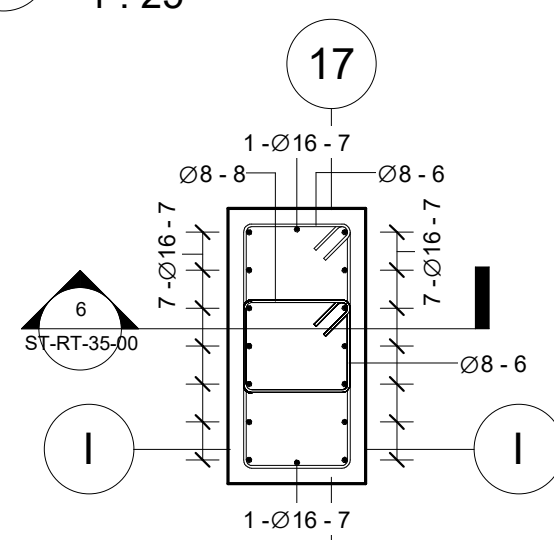


3 CG1 Without Pier
1 : 20

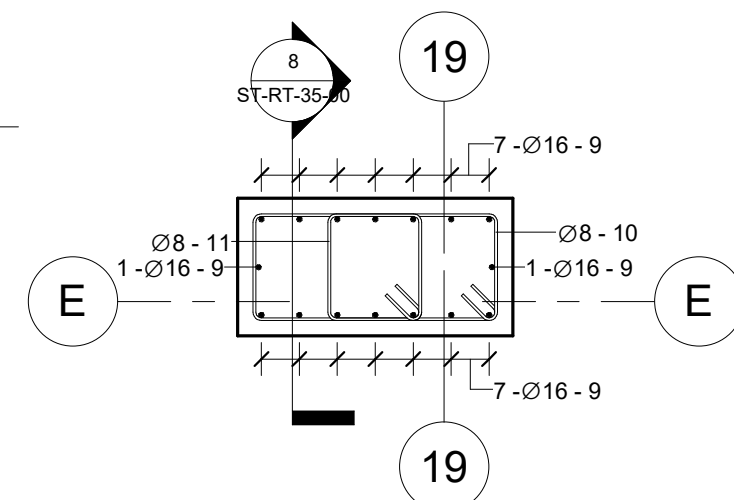


6 CG2 With Pier(Section)
1 : 25

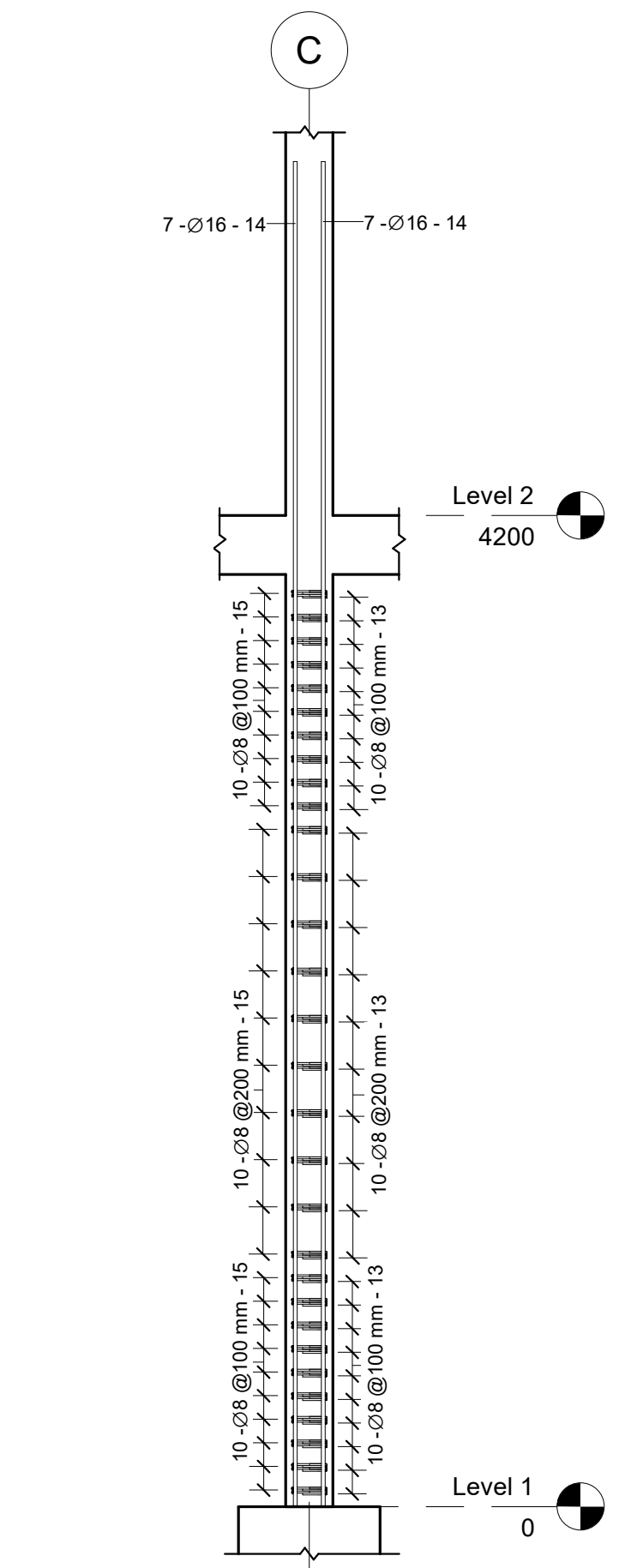
8 CG2 Without Pier(Section)
1 : 25



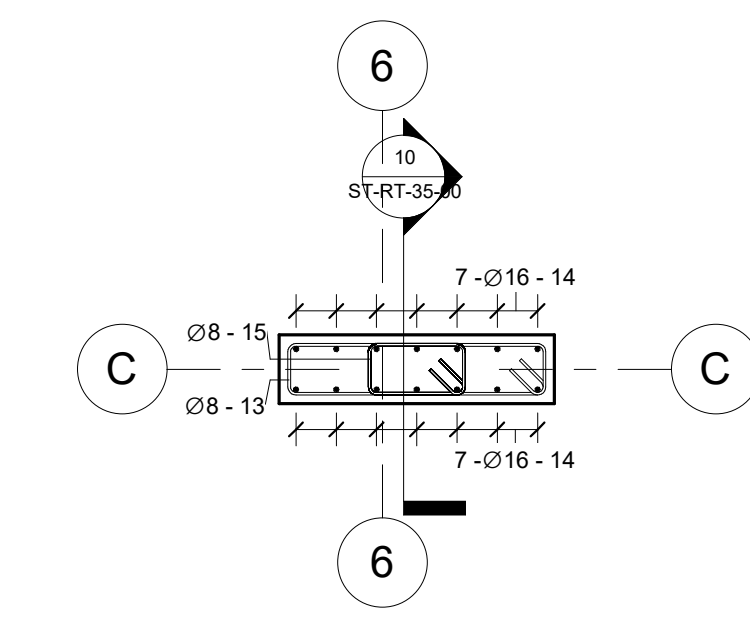
5 CG2 With Pier
1 : 20



7 CG2 Without Pier
1 : 20



10 CG3 With Pier(Section)
1 : 25



9 CG3 With Pier
1 : 20

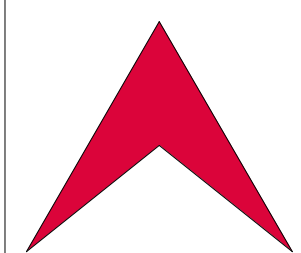
Columns CG1 With pier , CF1 , CS1 , CTh1 and CR1 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 58 Columns
1	8 mm	28	1420 mm	40 m	310 mm	310 mm	110 mm	110 mm	16	910
2	16 mm	8	5700 mm	46 m	5700 mm	0 mm	0 mm	0 mm	72	4174
		36	85 m						88	5084

Column CG1 Without pier Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 12 Columns
3	16 mm	8	6900 mm	55 m	6900 mm	0 mm	0 mm	0 mm	87	1045
4	8 mm	34	1420 mm	48 m	310 mm	310 mm	110 mm	110 mm	19	229
5	16 mm	8	2320 mm	19 m	2100 mm	250 mm	0 mm	0 mm	29	352
		50	122 m						135	1626

Columns CG2 With pier , CF2 , CS2 , CTh2 and CR2 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 60 Columns
6	8 mm	30	2220 mm	67 m	710 mm	310 mm	110 mm	110 mm	26	1577
7	16 mm	16	5700 mm	91 m	5700 mm	0 mm	0 mm	0 mm	144	8637
8	8 mm	30	1340 mm	40 m	270 mm	310 mm	110 mm	110 mm	16	952
		76	198 m						186	11165

Column CG2 Without pier Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 6 Columns
9	16 mm	16	6900 mm	110 m	6900 mm	0 mm	0 mm	0 mm	174	1045
10	8 mm	34	2220 mm	75 m	710 mm	310 mm	110 mm	110 mm	30	179
11	8 mm	34	1340 mm	46 m	270 mm	310 mm	110 mm	110 mm	18	108
12	16 mm	16	2320 mm	37 m	2100 mm	250 mm	0 mm	0 mm	59	352
		100	269 m						281	1684

Columns CG3 With pier , CF3 , CS3 , CTh3 and CR3 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 116 Columns
13	8 mm	30	1980 mm	59 m	750 mm	150 mm	110 mm	110 mm	23	2719
14	16 mm	14	5700 mm	80 m	5700 mm	0 mm	0 mm	0 mm	126	14610
15	8 mm	30	1040 mm	31 m	280 mm	150 mm	110 mm	110 mm	12	1428
		74	170 m						162	18757



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Columns Reinforcement (5)

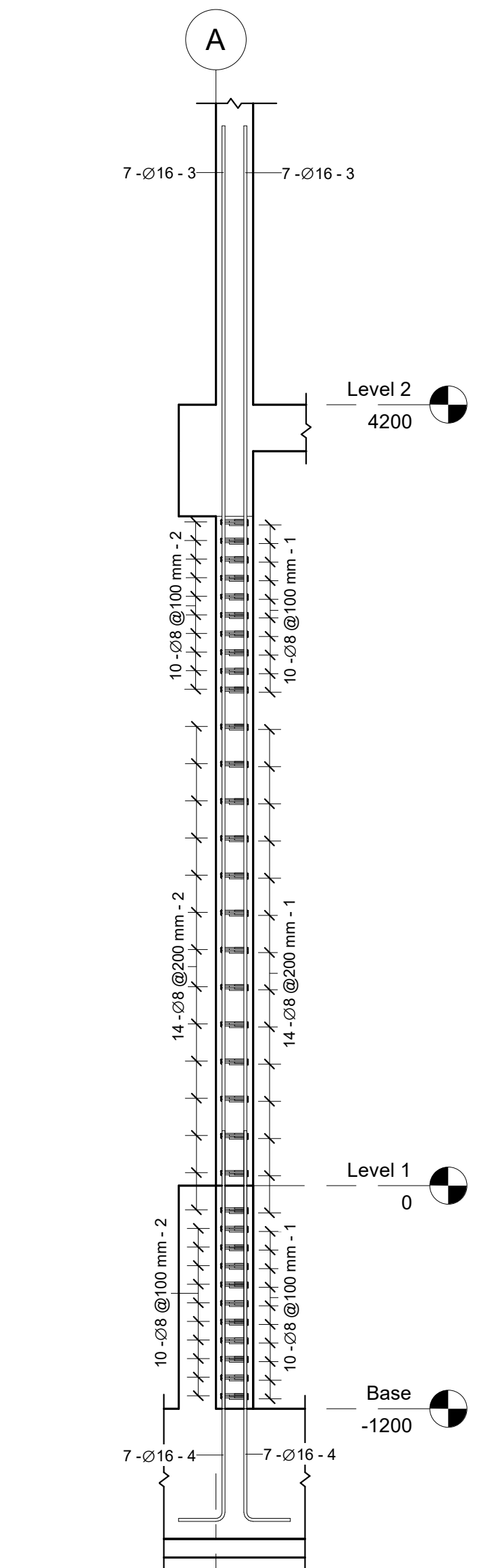
SCALE: As indicated

DESIGNED: Refaat Elburki

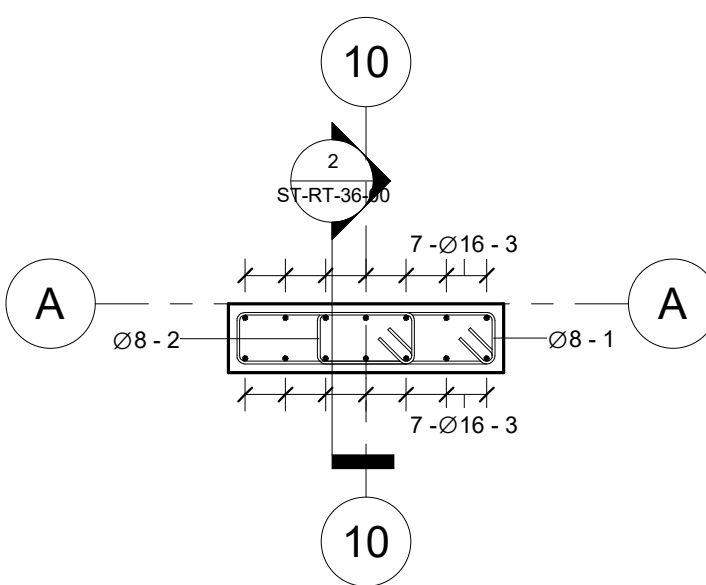
DRAWN: Awad Edrees

DATE: February 2021

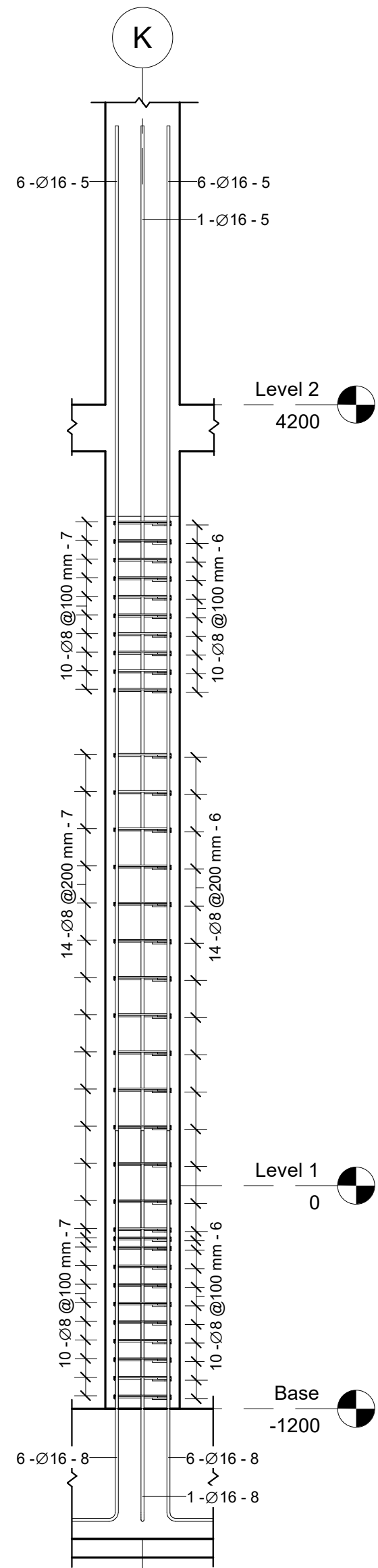
ST-RT-35-00



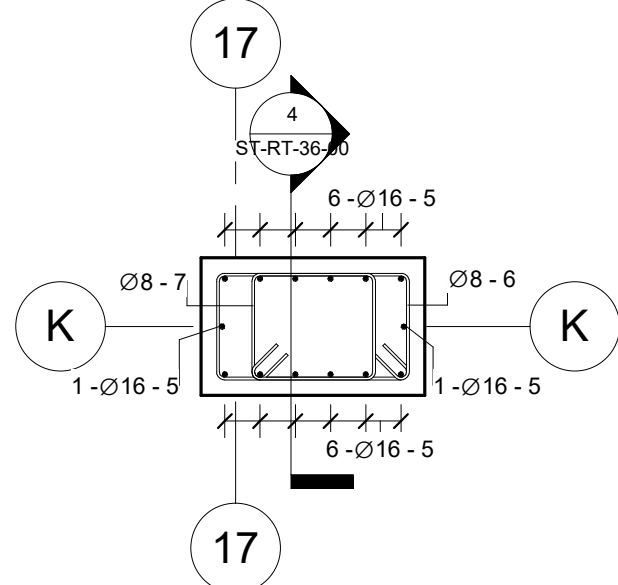
2 CG3 Without Pier(Section)
1 : 25



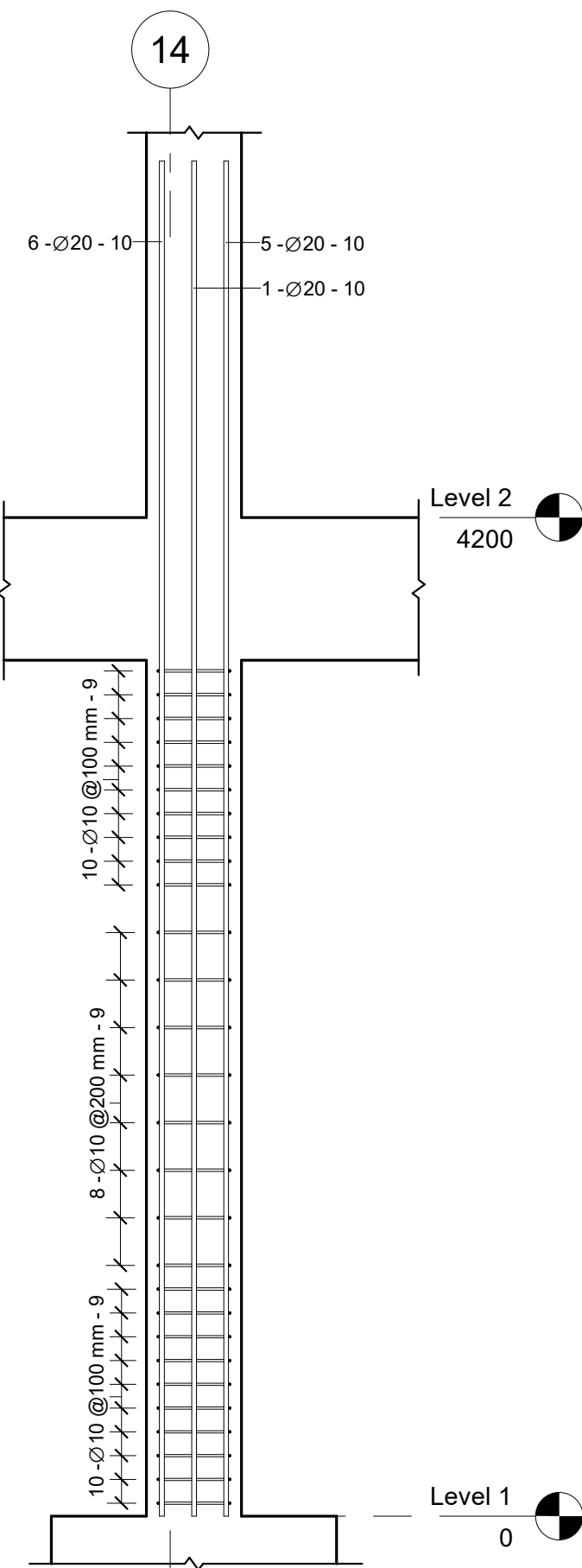
1 CG3 Without Pier
1 : 20



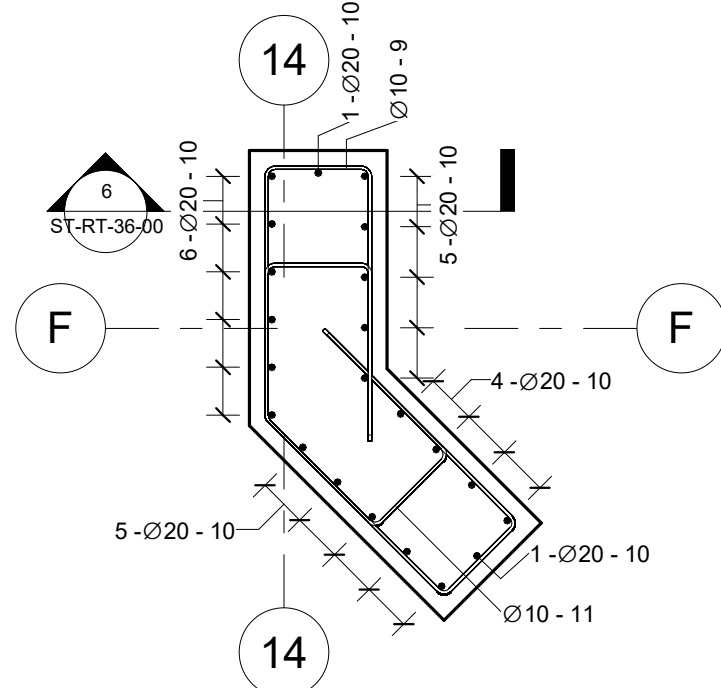
4 CG4(Section)
1 : 25



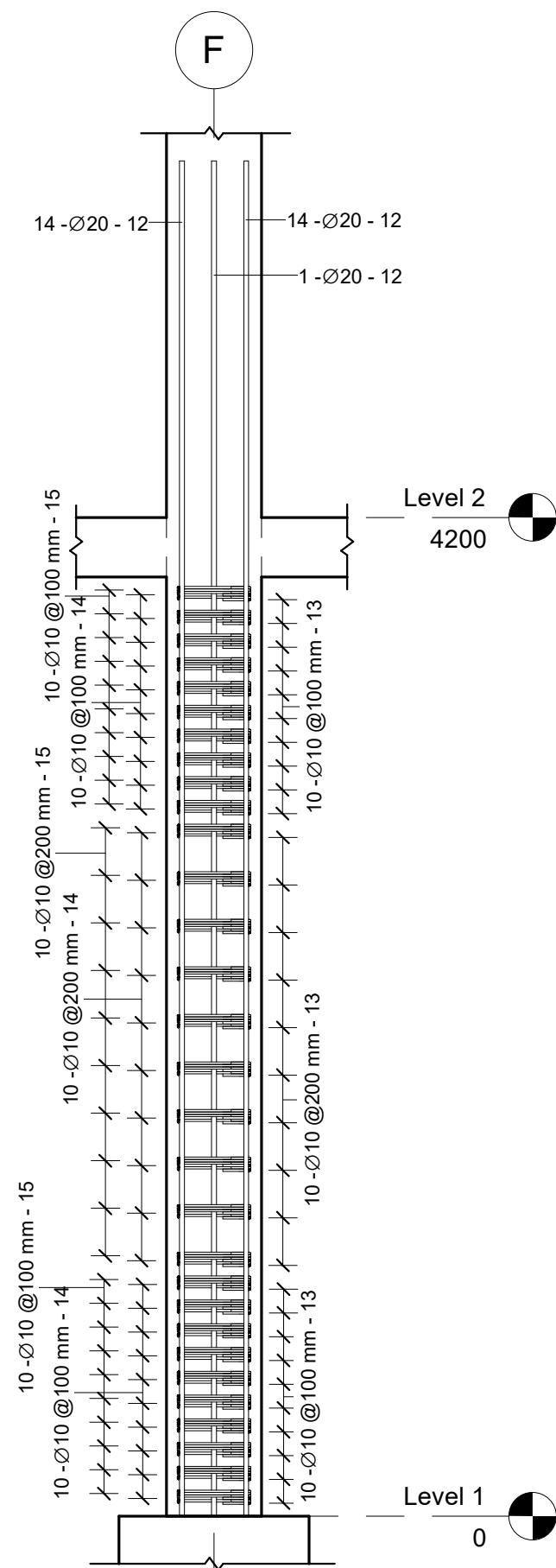
3 CG4
1 : 20



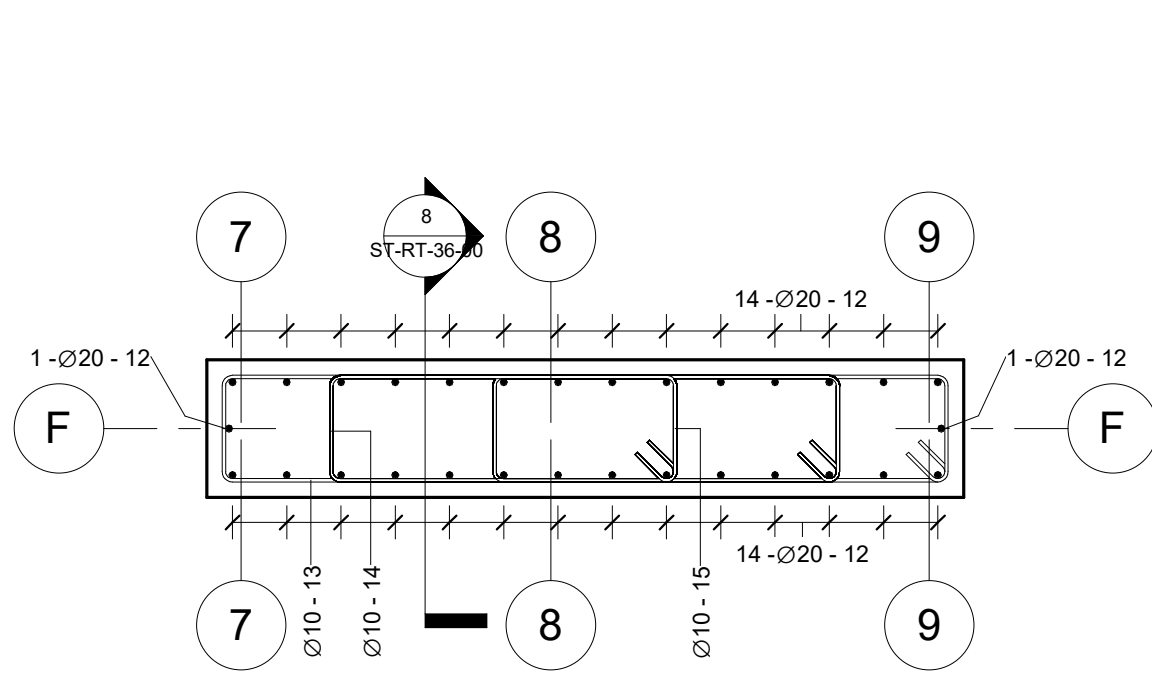
6 CG5(Section)
1 : 25



5 CG5
1 : 20



8 CG6(Section)
1 : 25



7 CG6
1 : 20

Column CG3 Without pier Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Image
1	8 mm	34	1980 mm	67 m	750 mm	150 mm	110 mm	110 mm	27	
2	8 mm	34	1040 mm	35 m	280 mm	150 mm	110 mm	110 mm	14	
3	16 mm	14	6900 mm	97 m	6900 mm	0 mm	0 mm	0 mm	152	
4	16 mm	14	2320 mm	32 m	2100 mm	250 mm	0 mm	0 mm	51	
		96	232 m		244					

Column CG4 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 4 Columns
5	16 mm	14	6900 mm	97 m	6900 mm	0 mm	0 mm	0 mm	152	610
6	8 mm	34	1920 mm	65 m	560 mm	310 mm	110 mm	110 mm	26	103
7	8 mm	34	1520 mm	52 m	360 mm	310 mm	110 mm	110 mm	20	82
8	16 mm	14	2320 mm	32 m	2100 mm	250 mm	0 mm	0 mm	51	205
		96	246 m		250					1000

Columns CG5,CF5,CS5&CTh5 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 32 Columns
9	10 mm	28	3600 mm	101 m	800 mm	310 mm	740 mm	740 mm	62	1989
10	20 mm	22	5700 mm	125 m	5700 mm	0 mm	0 mm	0 mm	309	9896
11	10 mm	28	2440 mm	68 m	500 mm	310 mm	450 mm	450 mm	42	1348
		78	295 m		414					13233

Columns CG6,CF6,CS6&CTh6 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 16 Columns
12	20 mm	30	5700 mm	171 m	5700 mm	0 mm	0 mm	0 mm	422	6747
13	10 mm	30	5040 mm	151 m	2110 mm	310 mm	130 mm	130 mm	93	1492
14	10 mm	30	3780 mm	113 m	1480 mm	310 mm	130 mm	130 mm	70	1119
15	10 mm	30	1890 mm	57 m	530 mm	310 mm	130 mm	130 mm	35	559
		120	492 m		620					9917

L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka البركة
Jamal Abdalnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية



Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Columns Reinforcement (6)

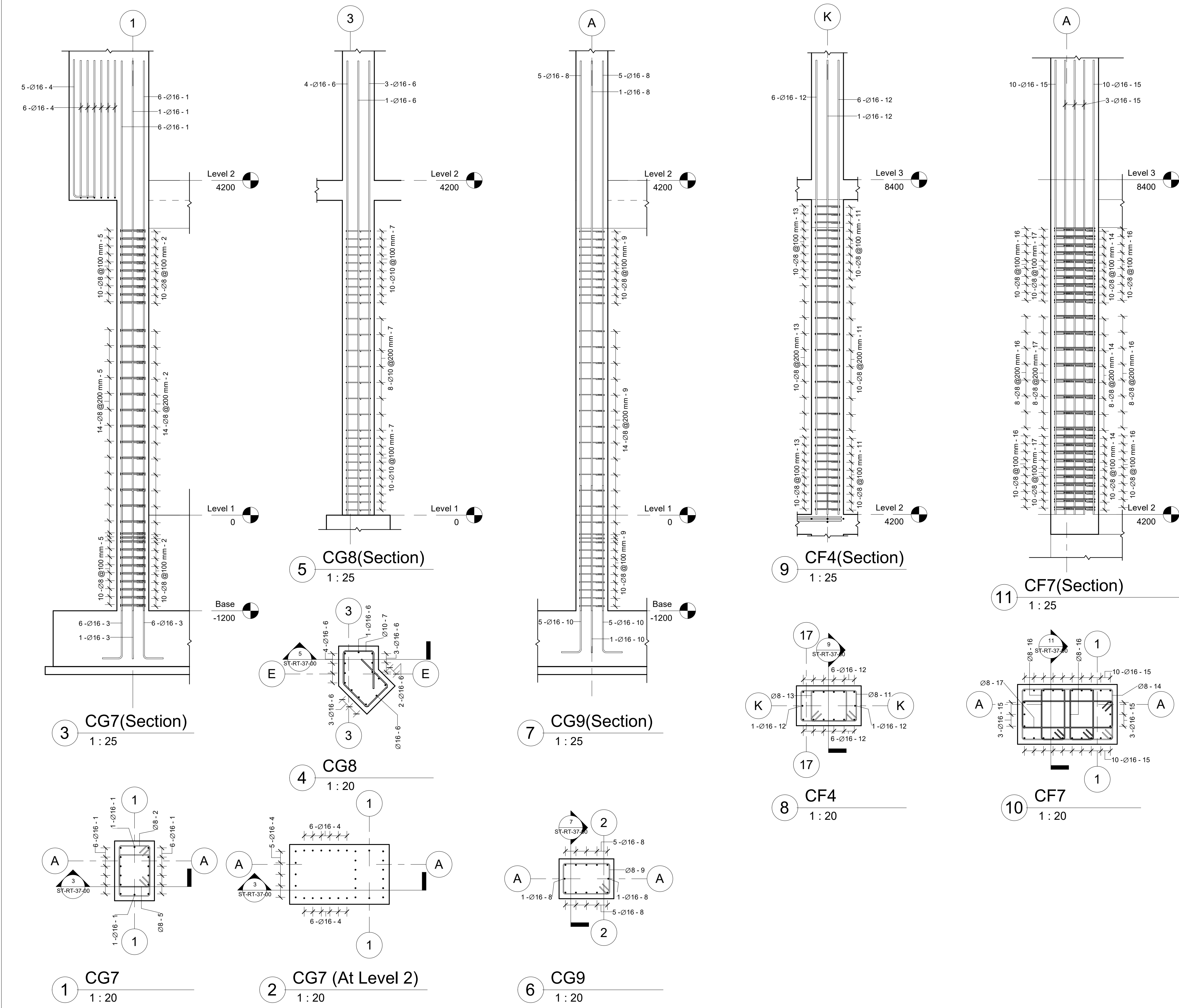
SCALE: As indicated

DESIGNED: Refaat Elburki

DRAWN: Awad Edrees

DATE: February 2021

ST-RT-36-00



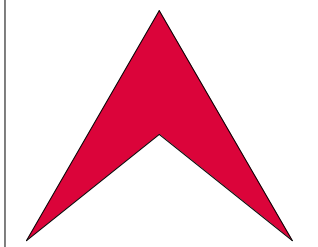
Column CG7 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Columns
1	16 mm	14	6900 mm	97 m	6900 mm	0 mm	0 mm	0 mm	152	305
2	8 mm	34	1820 mm	62 m	510 mm	310 mm	110 mm	110 mm	24	49
3	16 mm	14	2320 mm	32 m	2100 mm	250 mm	0 mm	0 mm	51	103
4	16 mm	17	1950 mm	33 m	1730 mm	250 mm	0 mm	0 mm	52	105
5	8 mm	34	1450 mm	49 m	330 mm	310 mm	110 mm	110 mm	19	39
		113	273 m						300	600

Columns CG8,CF8,CS8,CTh8&CR8 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 18 Columns
6	16 mm	14	5700 mm	80 m	5700 mm	0 mm	0 mm	0 mm	126	2267
7	10 mm	28	1970 mm	55 m	380 mm	310 mm	340 mm	340 mm	34	612
		42	135 m						160	2879

Column CG9 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Columns
8	16 mm	12	6900 mm	83 m	6900 mm	0 mm	0 mm	0 mm	131	261
9	8 mm	34	1740 mm	59 m	470 mm	310 mm	110 mm	110 mm	23	47
10	16 mm	12	2320 mm	28 m	2100 mm	250 mm	0 mm	0 mm	44	88
		58	170 m						198	396

Columns CF4,CS4&CTh4 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 12 Columns
11	8 mm	30	1920 mm	58 m	560 mm	310 mm	110 mm	110 mm	23	273
12	16 mm	14	5700 mm	80 m	5700 mm	0 mm	0 mm	0 mm	126	1511
13	8 mm	30	1520 mm	46 m	360 mm	310 mm	110 mm	110 mm	18	216
		74	183 m						167	2000

Columns CF7,CS7,CTh7&CR7 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 8 Columns
14	8 mm	28	3020 mm	85 m	910 mm	510 mm	110 mm	110 mm	33	267
15	16 mm	26	5700 mm	148 m	5700 mm	0 mm	0 mm	0 mm	234	1871
16	8 mm	56	1680 mm	94 m	240 mm	510 mm	110 mm	110 mm	37	297
17	8 mm	28	2540 mm	71 m	910 mm	270 mm	110 mm	110 mm	28	225
		138	398 m						332	2660



L Libyan

C Center

E For Engineering

C Consultancy

Certified From Autodesk

AL-baraka البركة

Jamal Abdalnasser st. شارع جمال عبد الناصر

Noaman Tower برج النعمان

Benghazi-Libya بنغازي-ليبيا

LCEC@mail.com

Mobile +218 92 512 3567

Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة

ليبيا - بنغازي

الفويهاة الغربية

شارع العامرية

Rev.	AMENDMENT	DATE

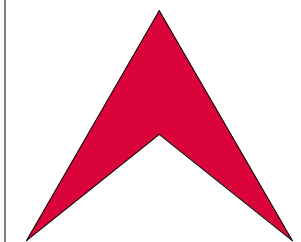
Court of Benghazi North

Benghazi

Columns Reinforcement (7)

ST-RT-37-00

SCALE:	As indicated	DATE:	February 2021
DESIGNED:	Refaat Elburki		
DRAWN:	Awad Edrees		



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Columns Reinforcement (8)

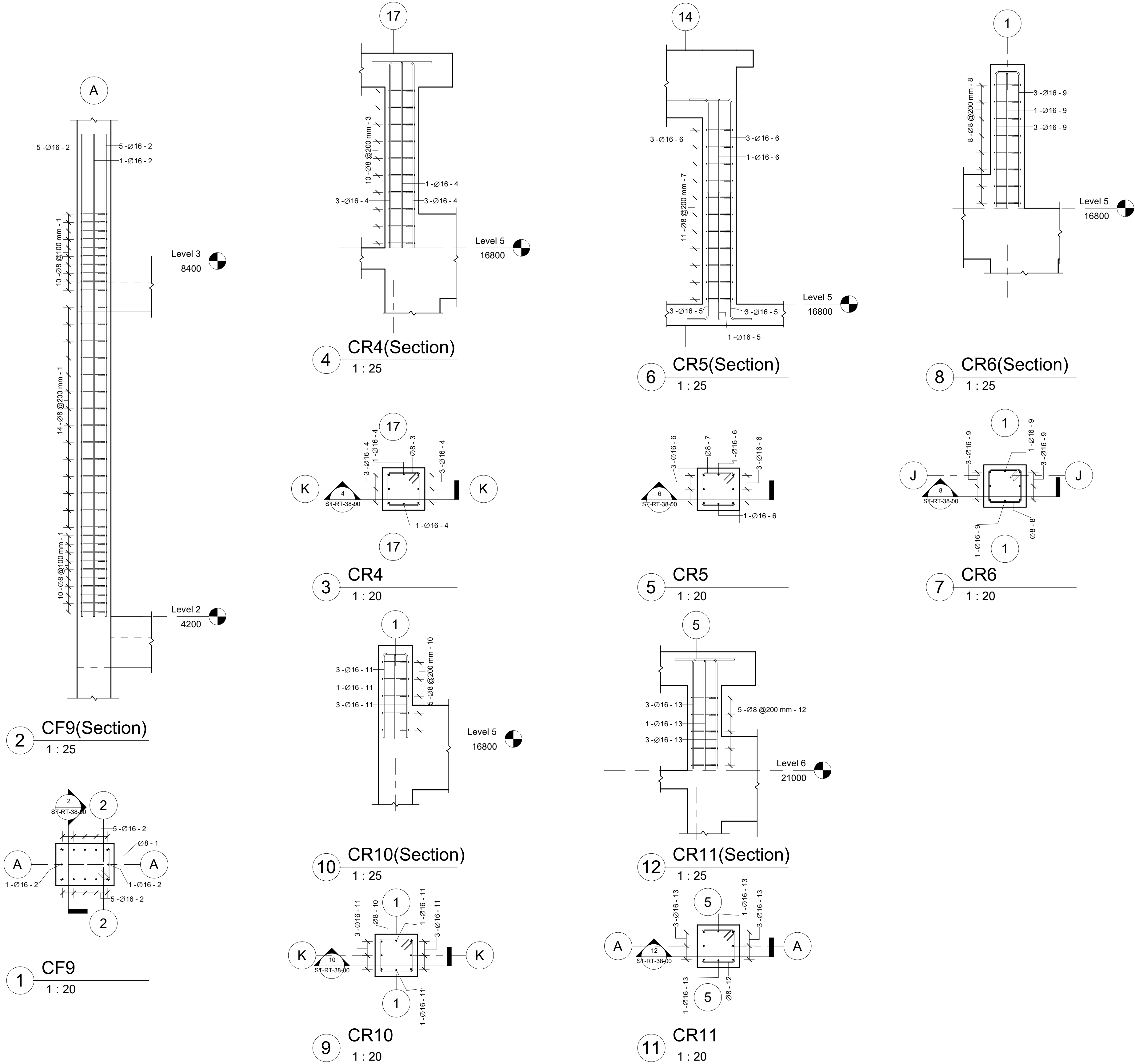
SCALE: As indicated

DESIGNED: Refaat Elburki

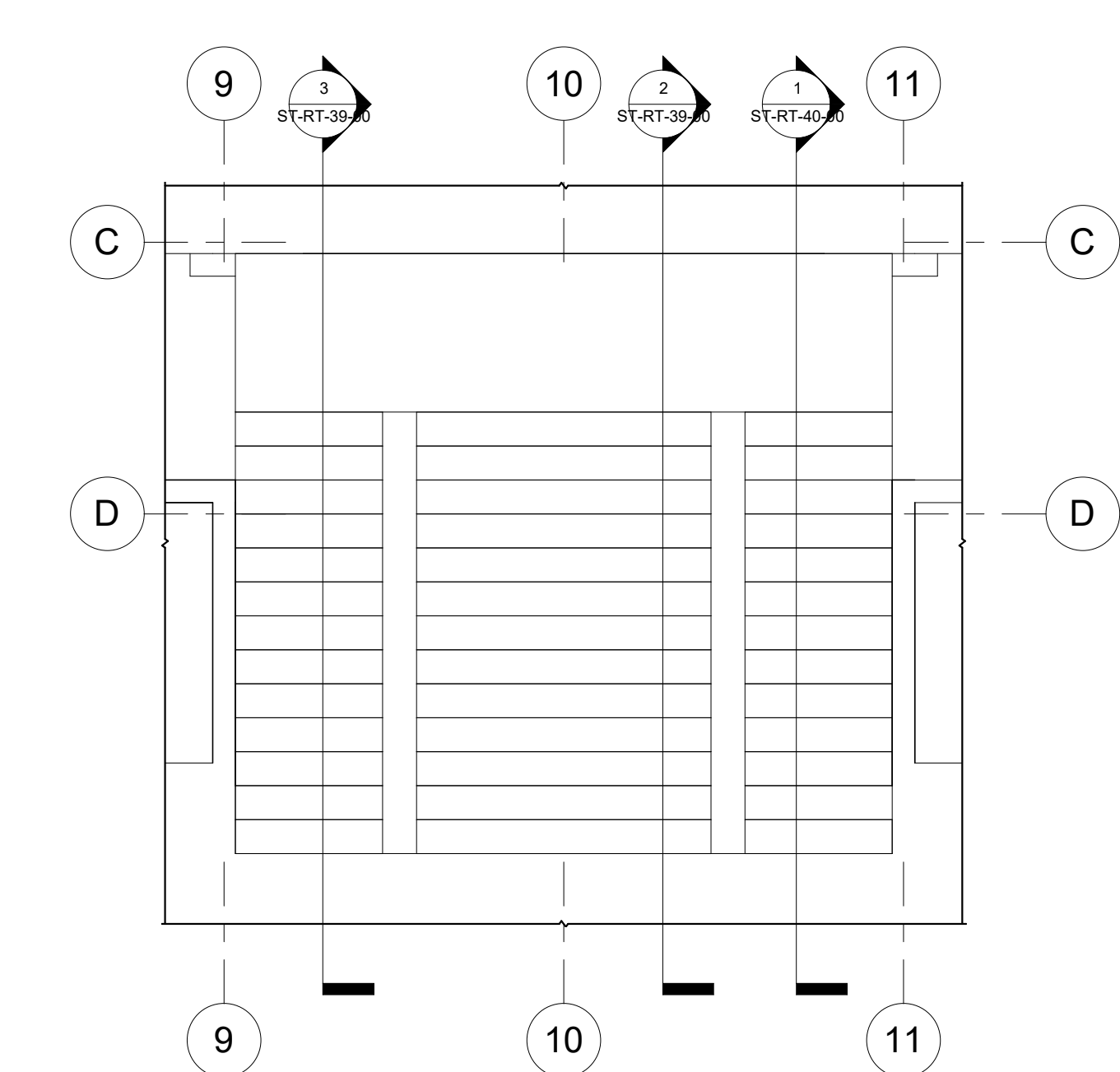
DRAWN: Awad Edrees

DATE: February 2021

ST-RT-38-00

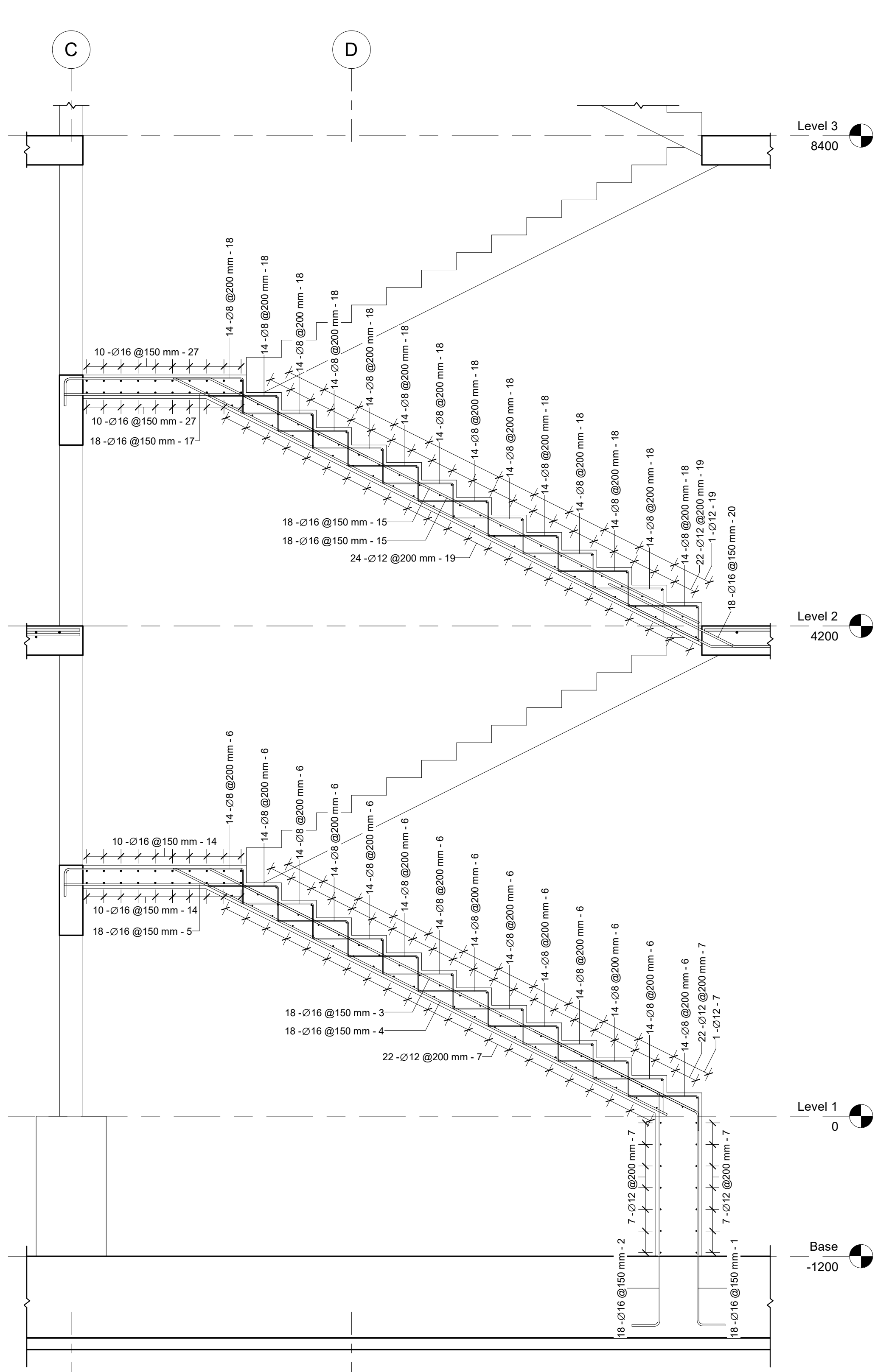


Columns CF9,CS9,CTH9&CR9 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 8 Columns	Image
1	8 mm	34	1740 mm	59 m	470 mm	310 mm	110 mm	110 mm	23	187	
2	16 mm	12	5700 mm	68 m	5700 mm	0 mm	0 mm	0 mm	108	864	
		46	128 m						131	1050	

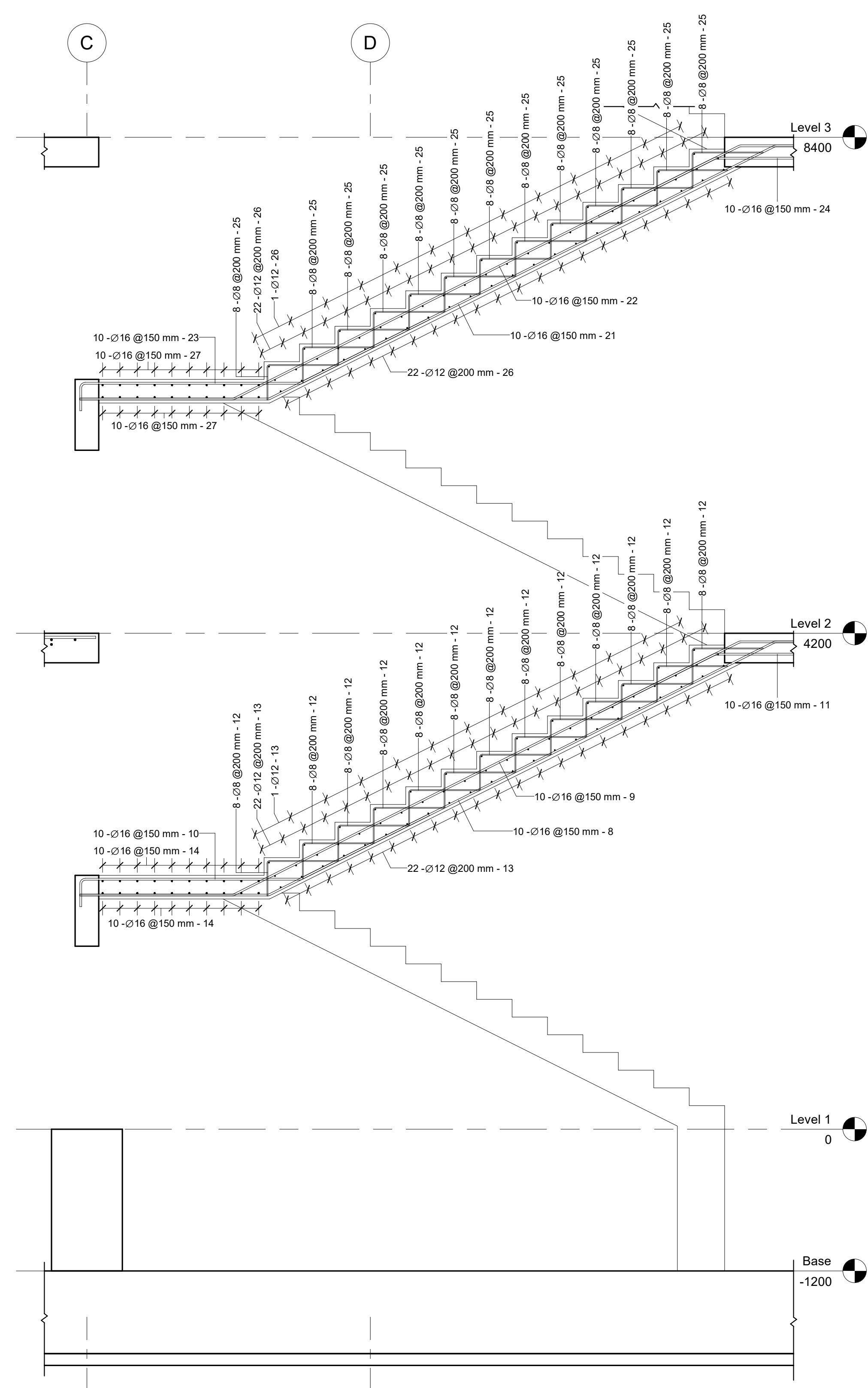


1 STG1 & STF1
1 : 50

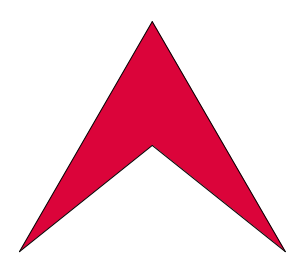
Stair STG1 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Image
1	16 mm	18	3210 mm	58 m	1190 mm	1830 mm	240 mm	1060 mm	91	
2	16 mm	18	3390 mm	61 m	1190 mm	2000 mm	240 mm	1070 mm	96	
3	16 mm	18	6090 mm	110 m	4640 mm	1250 mm	240 mm	2070 mm	173	
4	16 mm	18	5860 mm	105 m	4710 mm	950 mm	240 mm	2100 mm	166	
5	16 mm	18	2720 mm	49 m	1520 mm	1200 mm	0 mm	680 mm	77	
6	8 mm	196	880 mm	172 m	600 mm	300 mm	0 mm	0 mm	68	
7	12 mm	71	2550 mm	181 m	2550 mm	0 mm	0 mm	0 mm	161	
8	16 mm	20	7590 mm	152 m	1200 mm	4800 mm	1600 mm	2160 mm	240	
9	16 mm	20	7290 mm	146 m	1200 mm	4800 mm	1300 mm	2160 mm	230	
10	16 mm	20	3290 mm	66 m	1220 mm	1870 mm	240 mm	550 mm	104	
11	16 mm	20	2300 mm	46 m	1100 mm	1200 mm	0 mm	490 mm	73	
12	8 mm	208	880 mm	183 m	300 mm	600 mm	0 mm	0 mm	72	
13	12 mm	114	1250 mm	143 m	1250 mm	0 mm	0 mm	0 mm	127	
14	16 mm	20	5750 mm	115 m	5750 mm	0 mm	0 mm	0 mm	182	
		779		1586 m					1859	



2 Stairs (Section 1)
1 : 25



3 Stairs (Section 2)
1 : 25



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفيوهات الغربية
شارع العامرية

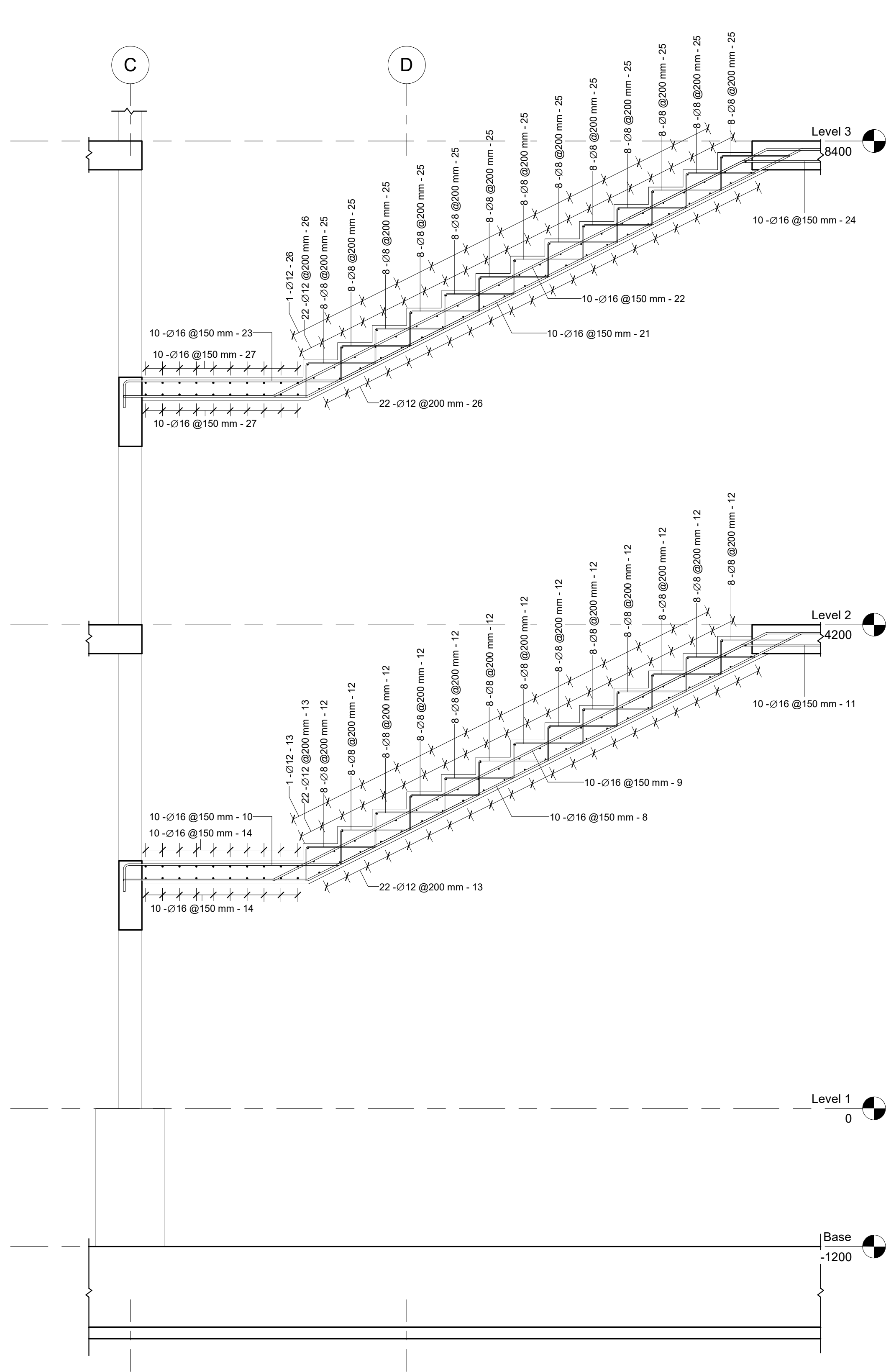
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Srairs Reinforcement (1)

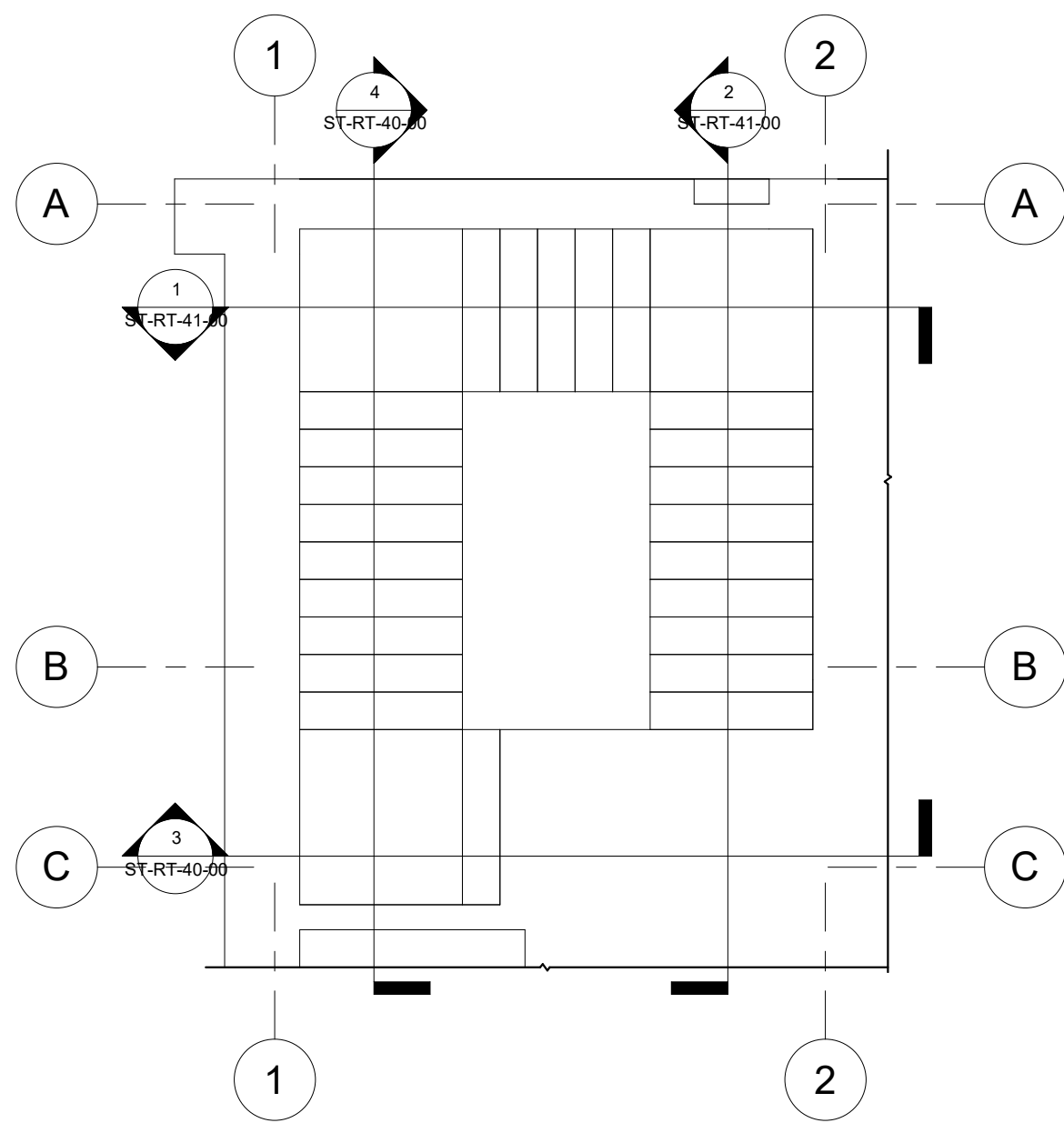
SCALE: As indicated
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

DATE: February 2021

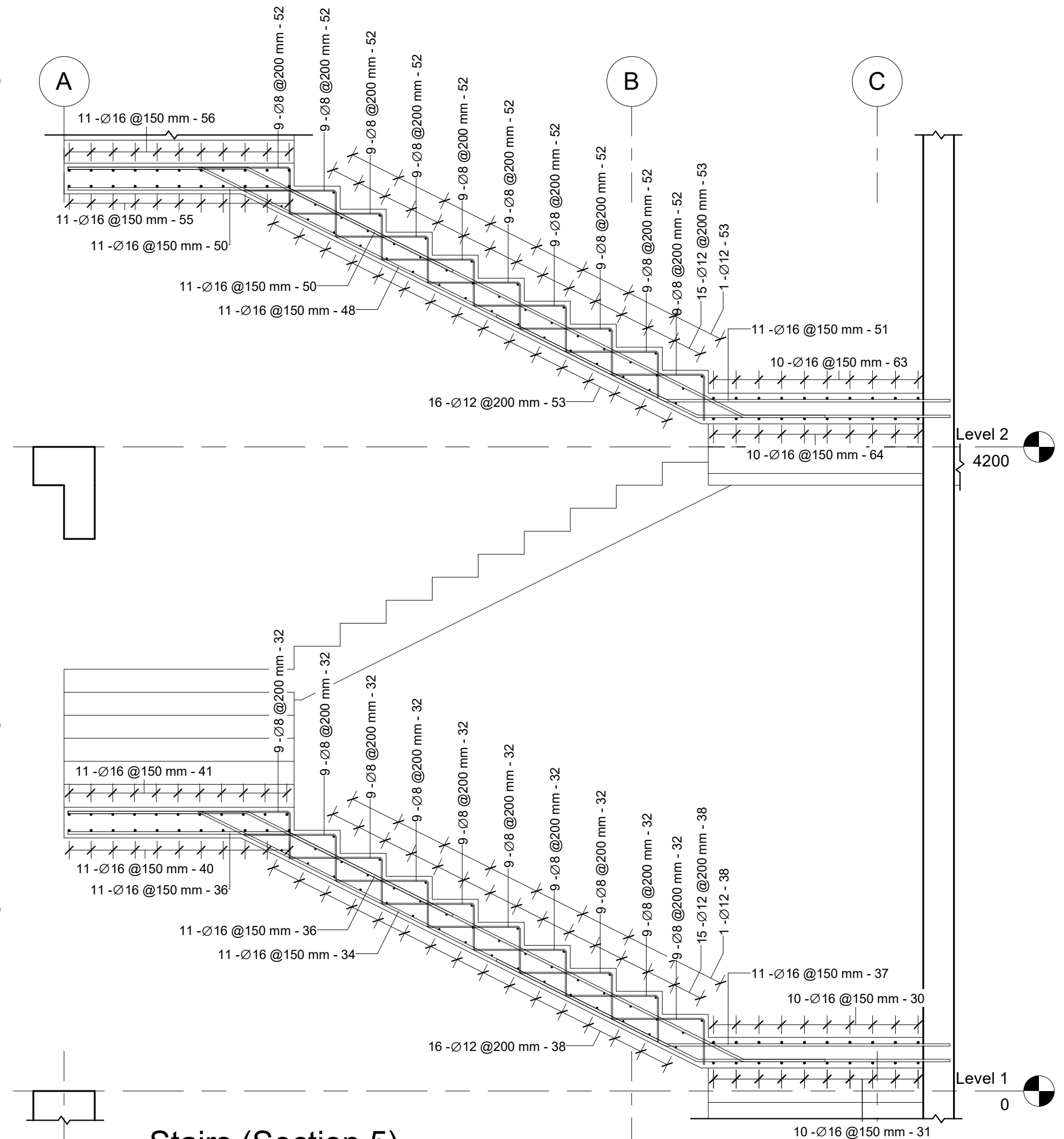
ST-RT-39-00



1 Stairs (Section 3)
1 : 25

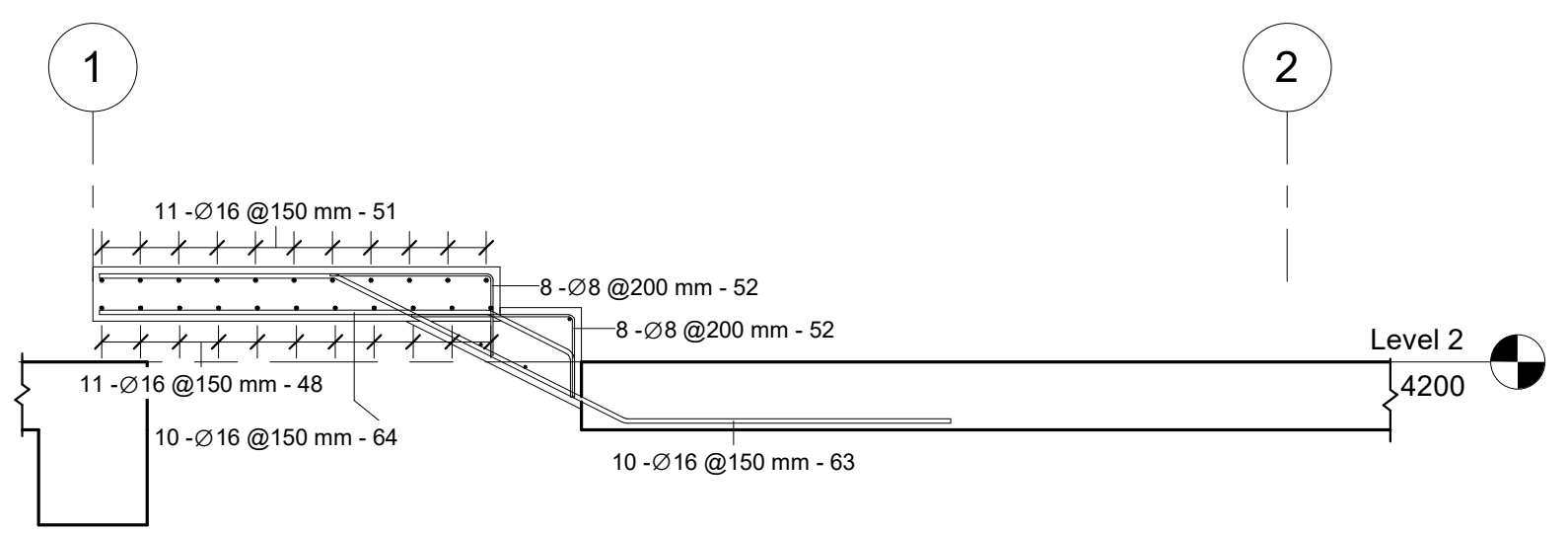


2 STG2 & STF2
1 : 50

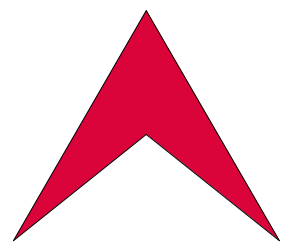


4 Stairs (Section 5)
1 : 25

Stairs STF1&STS1 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Stairs
15	16 mm	18	6140 mm	111 m	4680 mm	1250 mm	240 mm	2090 mm	174	349
16	16 mm	18	6160 mm	111 m	5000 mm	950 mm	240 mm	2240 mm	175	350
17	16 mm	18	2720 mm	49 m	1520 mm	1200 mm	0 mm	680 mm	77	155
18	8 mm	196	880 mm	172 m	600 mm	300 mm	0 mm	0 mm	68	136
19	12 mm	59	2550 mm	150 m	2550 mm	0 mm	0 mm	0 mm	134	267
20	16 mm	36	2400 mm	86 m	1200 mm	1200 mm	0 mm	540 mm	136	273
21	16 mm	20	7590 mm	152 m	1200 mm	4800 mm	1600 mm	2160 mm	240	479
22	16 mm	20	7290 mm	146 m	1200 mm	4800 mm	1300 mm	2160 mm	230	460
23	16 mm	20	3290 mm	66 m	1220 mm	1870 mm	240 mm	550 mm	104	208
24	16 mm	20	2300 mm	46 m	1100 mm	1200 mm	0 mm	490 mm	73	145
25	8 mm	208	880 mm	183 m	300 mm	600 mm	0 mm	0 mm	72	144
26	12 mm	114	1250 mm	143 m	1250 mm	0 mm	0 mm	0 mm	127	253
27	16 mm	20	5750 mm	115 m	5750 mm	0 mm	0 mm	0 mm	182	363
767			1530 m						1791	3582



3 Stairs (Section 4)
1 : 25



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



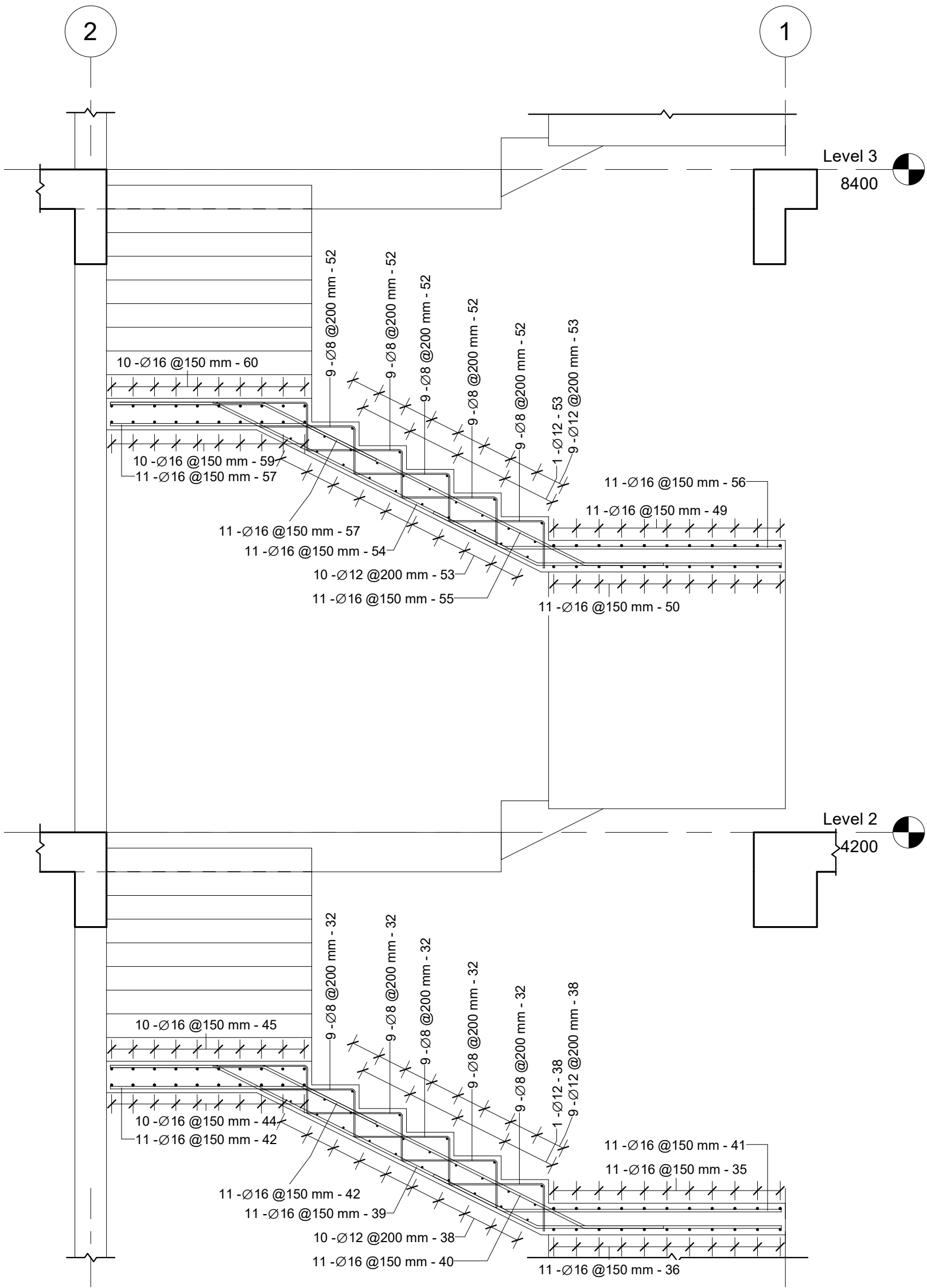
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

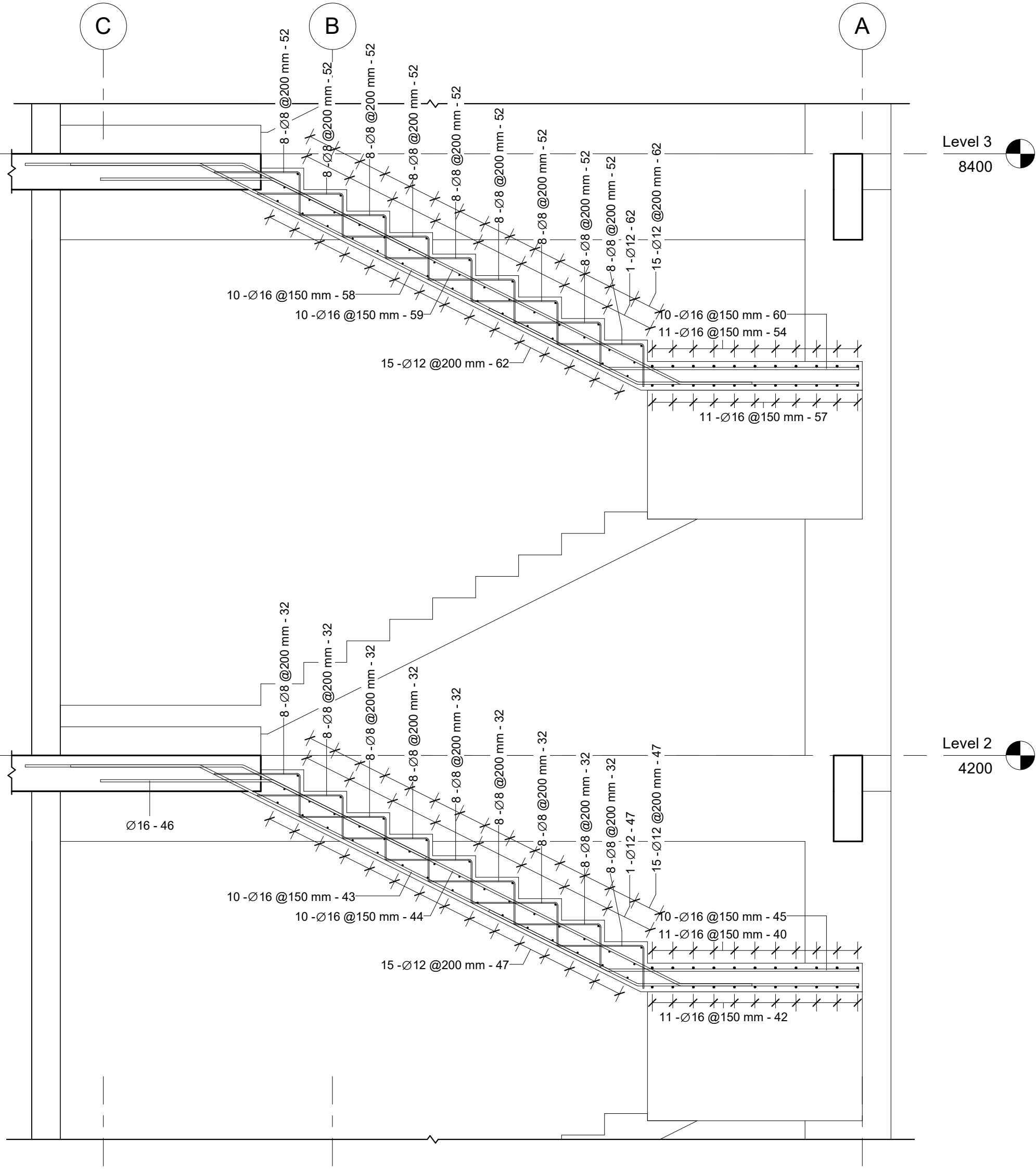
Court of Benghazi North
Benghazi
Srairs Reinforcement (2)

ST-RT-40-00

SCALE:	As indicated	DATE:	February 2021
DESIGNED:	Refaat Elburki		
DRAWN:	Awad Edrees		



1 Stairs (Section 6)
1 : 25



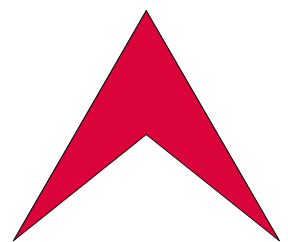
2 Stairs (Section 7)
1 : 25

Stairs STG2&STG3 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Stairs	Image
28	16 mm	10	3840 mm	38 m	1830 mm	650 mm	1170 mm	580 mm	61	121	
29	16 mm	10	3750 mm	38 m	1900 mm	500 mm	1170 mm	450 mm	59	118	
30	16 mm	10	1970 mm	20 m	500 mm	980 mm	500 mm	880 mm	31	62	
31	16 mm	10	2270 mm	23 m	500 mm	350 mm	1440 mm	310 mm	36	72	
32	8 mm	232	880 mm	204 m	600 mm	300 mm	0 mm	0 mm	81	161	
33	12 mm	15	1350 mm	20 m	1350 mm	0 mm	0 mm	0 mm	18	36	
34	16 mm	11	6130 mm	67 m	1650 mm	3620 mm	870 mm	1630 mm	106	213	
35	16 mm	11	5320 mm	59 m	530 mm	3620 mm	1170 mm	1630 mm	92	185	
36	16 mm	11	2630 mm	29 m	1200 mm	1440 mm	0 mm	540 mm	46	91	
37	16 mm	11	3090 mm	34 m	1240 mm	1850 mm	0 mm	550 mm	54	107	
38	12 mm	64	1450 mm	93 m	1450 mm	0 mm	0 mm	0 mm	82	165	
39	16 mm	11	4490 mm	49 m	1550 mm	2280 mm	670 mm	1030 mm	78	156	
40	16 mm	11	3740 mm	41 m	500 mm	2280 mm	970 mm	1030 mm	65	130	
41	16 mm	11	2250 mm	25 m	500 mm	1760 mm	0 mm	220 mm	39	78	
42	16 mm	11	1730 mm	19 m	500 mm	1240 mm	0 mm	220 mm	30	60	
43	16 mm	10	6180 mm	62 m	1550 mm	3420 mm	1220 mm	1540 mm	98	195	
44	16 mm	10	5120 mm	51 m	500 mm	3420 mm	1200 mm	1540 mm	81	162	
45	16 mm	10	2680 mm	27 m	930 mm	1750 mm	0 mm	420 mm	42	85	
46	16 mm	10	2400 mm	24 m	1200 mm	1200 mm	0 mm	540 mm	38	76	
47	12 mm	39	1250 mm	49 m	1250 mm	0 mm	0 mm	0 mm	43	87	
		518	971 m						1180	2359	

Stairs STF2&STF3,STS2&STS3,STTh2&STTh3 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 6 Stairs	Image
48	16 mm	11	6130 mm	67 m	1650 mm	3620 mm	870 mm	1630 mm	106	639	
49	16 mm	11	5320 mm	59 m	530 mm	3620 mm	1170 mm	1630 mm	92	554	
50	16 mm	11	2630 mm	29 m	1200 mm	1440 mm	0 mm	540 mm	46	274	
51	16 mm	11	3090 mm	34 m	1240 mm	1850 mm	0 mm	550 mm	54	322	
52	8 mm	232	880 mm	204 m	600 mm	300 mm	0 mm	0 mm	81	483	
53	12 mm	64	1450 mm	93 m	1450 mm	0 mm	0 mm	0 mm	82	494	

Stairs STF2&STF3,STS2&STS3,STTh2&STTh3 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 6 Stairs	Image
54	16 mm	11	4490 mm	49 m	1550 mm	2280 mm	670 mm	1030 mm	78	468	
55	16 mm	11	3740 mm	41 m	500 mm	2280 mm	970 mm	1030 mm	65	390	
56	16 mm	11	2250 mm	25 m	500 mm	1760 mm	0 mm	220 mm	39	234	
57	16 mm	11	1730 mm	19 m	500 mm	1240 mm	0 mm	220 mm	30	180	
58	16 mm	10	6180 mm	62 m	1550 mm	3420 mm	1220 mm	1540 mm	98	585	
59	16 mm	10	5120 mm	51 m	500 mm	3420 mm	1200 mm	1540 mm	81	485	

Stairs STF2&STF3,STS2&STS3,STTh2&STTh3 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 6 Stairs	Image
60	16 mm	10	2680 mm	27 m	930 mm	1750 mm	0 mm	420 mm	42	254	
61	16 mm	10	2400 mm	24 m	1200 mm	1200 mm	0 mm	540 mm	38	227	
62	12 mm	39	1250 mm	49 m	1250 mm	0 mm	0 mm	0 mm	43	260	
63	16 mm	10	3260 mm	33 m	1200 mm	1200 mm	870 mm	550 mm	51	309	
64	16 mm	10	1930 mm	19 m	160 mm	350 mm	1440 mm	310 mm	30	183	
65	12 mm	3	1350 mm	4 m	1350 mm	0 mm	0 mm	0 mm	4	22	
		486	889 m						1060	6362	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Srairs Reinforcement (3)

SCALE: 1 : 25

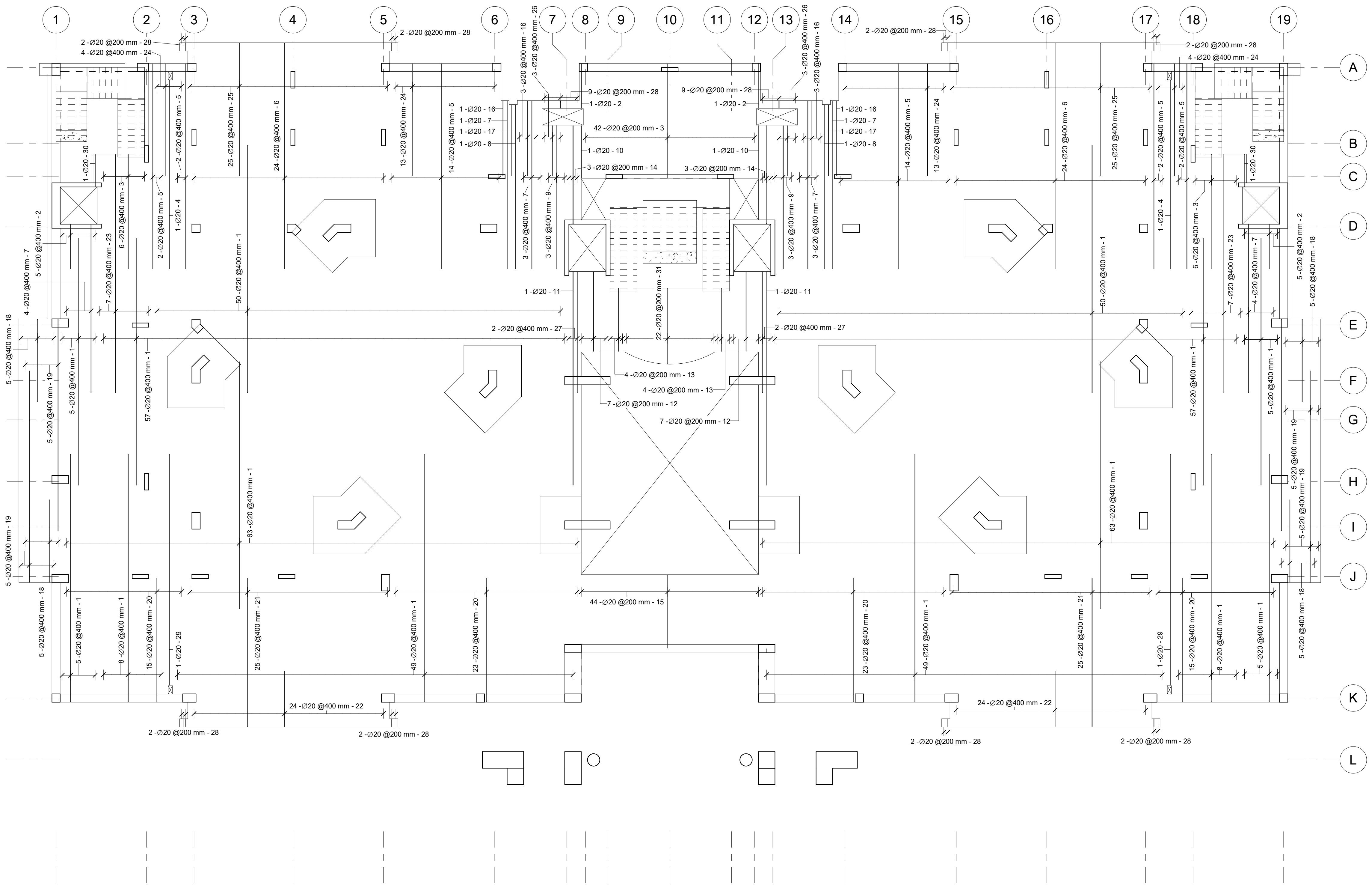
DATE: February 2021

DESIGNED: Refaat Elburki

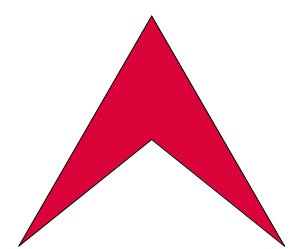
DRAWN: Awad Edrees

ST-RT-41-00

Ground Floor Slab Main Bottom Reinforcement (Major Direction) Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	474	12000 mm	5688 m	12000 mm	14027	
2	20 mm	12	2150 mm	26 m	2150 mm	64	
3	20 mm	54	5550 mm	300 m	5550 mm	739	
4	20 mm	2	9150 mm	18 m	9150 mm	45	
5	20 mm	36	9950 mm	358 m	9950 mm	883	
6	20 mm	48	10950 mm	526 m	10950 mm	1296	
7	20 mm	16	8150 mm	130 m	8150 mm	322	
8	20 mm	2	7950 mm	16 m	7950 mm	39	
9	20 mm	6	6950 mm	42 m	6950 mm	103	
10	20 mm	2	2550 mm	5 m	2550 mm	13	
11	20 mm	2	10350 mm	21 m	10350 mm	51	
12	20 mm	14	3850 mm	54 m	3850 mm	133	
13	20 mm	8	3050 mm	24 m	3050 mm	60	
14	20 mm	6	4750 mm	29 m	4750 mm	70	
15	20 mm	44	3550 mm	156 m	3550 mm	385	
16	20 mm	8	3650 mm	29 m	3650 mm	72	
17	20 mm	2	3450 mm	7 m	3450 mm	17	
18	20 mm	20	4000 mm	80 m	4000 mm	197	
19	20 mm	20	10250 mm	205 m	10250 mm	506	
20	20 mm	76	6000 mm	456 m	6000 mm	1125	
21	20 mm	50	7200 mm	360 m	7200 mm	888	
22	20 mm	48	2700 mm	130 m	2700 mm	320	
23	20 mm	14	11550 mm	162 m	11550 mm	399	
24	20 mm	34	5450 mm	185 m	5450 mm	457	
25	20 mm	50	6450 mm	323 m	6450 mm	795	
26	20 mm	6	2450 mm	15 m	2450 mm	36	
27	20 mm	4	5850 mm	23 m	5850 mm	58	
28	20 mm	34	350 mm	12 m	350 mm	29	
29	20 mm	2	11200 mm	22 m	11200 mm	55	
30	20 mm	2	1550 mm	3 m	1550 mm	8	
31	20 mm	22	Variable	76 m	Variable	187	
		1118		9480 m		23379	



1 Ground Floor Slab Main Bottom Reinforcement (Major Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

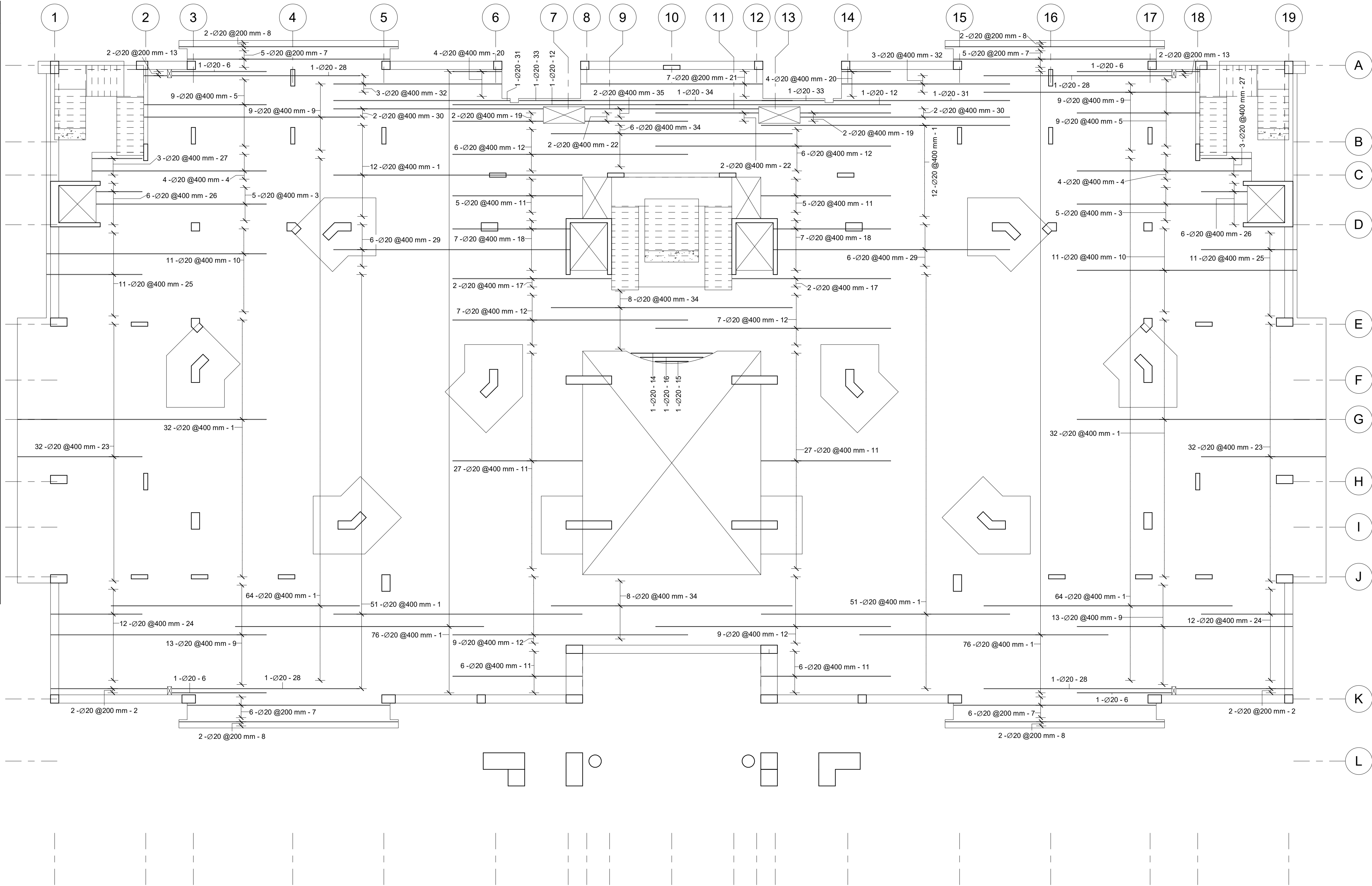
AL-baraka البركة
Jamal Abdalnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



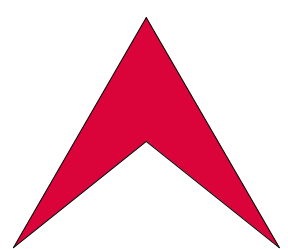
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفيوهات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE	Court of Benghazi North	
			Benghazi	
			Ground Floor Slab Main Bottom Reinforcement (Major Direction)	
			SCALE: 1 : 100	DATE: February 2021
			DESIGNED: Refaat Elburki	ST-RT-42-00
			DRAWN: Awad Edrees	

Ground Floor Slab Main Bottom Reinforcement (Minor Direction) Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	470	12000 mm	5640 m	12000 mm	13909	
2	20 mm	4	5600 mm	22 m	5600 mm	55	
3	20 mm	10	8200 mm	82 m	8200 mm	202	
4	20 mm	8	8400 mm	67 m	8400 mm	166	
5	20 mm	18	5900 mm	106 m	5900 mm	262	
6	20 mm	4	4550 mm	18 m	4550 mm	45	
7	20 mm	22	9750 mm	215 m	9750 mm	529	
8	20 mm	8	10550 mm	84 m	10550 mm	208	
9	20 mm	44	10400 mm	458 m	10400 mm	1129	
10	20 mm	22	10600 mm	233 m	10600 mm	575	
11	20 mm	76	6250 mm	475 m	6250 mm	1171	
12	20 mm	46	11350 mm	522 m	11350 mm	1288	
13	20 mm	4	1100 mm	4 m	1100 mm	11	
14	20 mm	2	3930 mm	8 m	3930 mm	19	
15	20 mm	2	1600 mm	3 m	1600 mm	8	
16	20 mm	2	3030 mm	6 m	3030 mm	15	
17	20 mm	4	7650 mm	31 m	7650 mm	75	
18	20 mm	14	5650 mm	79 m	5650 mm	195	
19	20 mm	4	4350 mm	17 m	4350 mm	43	
20	20 mm	8	2350 mm	19 m	2350 mm	46	
21	20 mm	7	8750 mm	61 m	8750 mm	151	
22	20 mm	4	4950 mm	20 m	4950 mm	49	
23	20 mm	64	6000 mm	384 m	6000 mm	947	
24	20 mm	24	4400 mm	106 m	4400 mm	260	
25	20 mm	22	4600 mm	101 m	4600 mm	250	
26	20 mm	12	2200 mm	26 m	2200 mm	65	
27	20 mm	6	2400 mm	14 m	2400 mm	36	
28	20 mm	4	9050 mm	36 m	9050 mm	89	
29	20 mm	12	11400 mm	137 m	11400 mm	337	
30	20 mm	4	10100 mm	40 m	10100 mm	100	
31	20 mm	2	8500 mm	17 m	8500 mm	42	
32	20 mm	6	8100 mm	49 m	8100 mm	120	
33	20 mm	2	3000 mm	6 m	3000 mm	15	
34	20 mm	23	11650 mm	268 m	11650 mm	661	
35	20 mm	2	8350 mm	17 m	8350 mm	41	
		966		9373 m		23114	



1 Ground Floor Slab Main Bottom Reinforcement (Minor Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

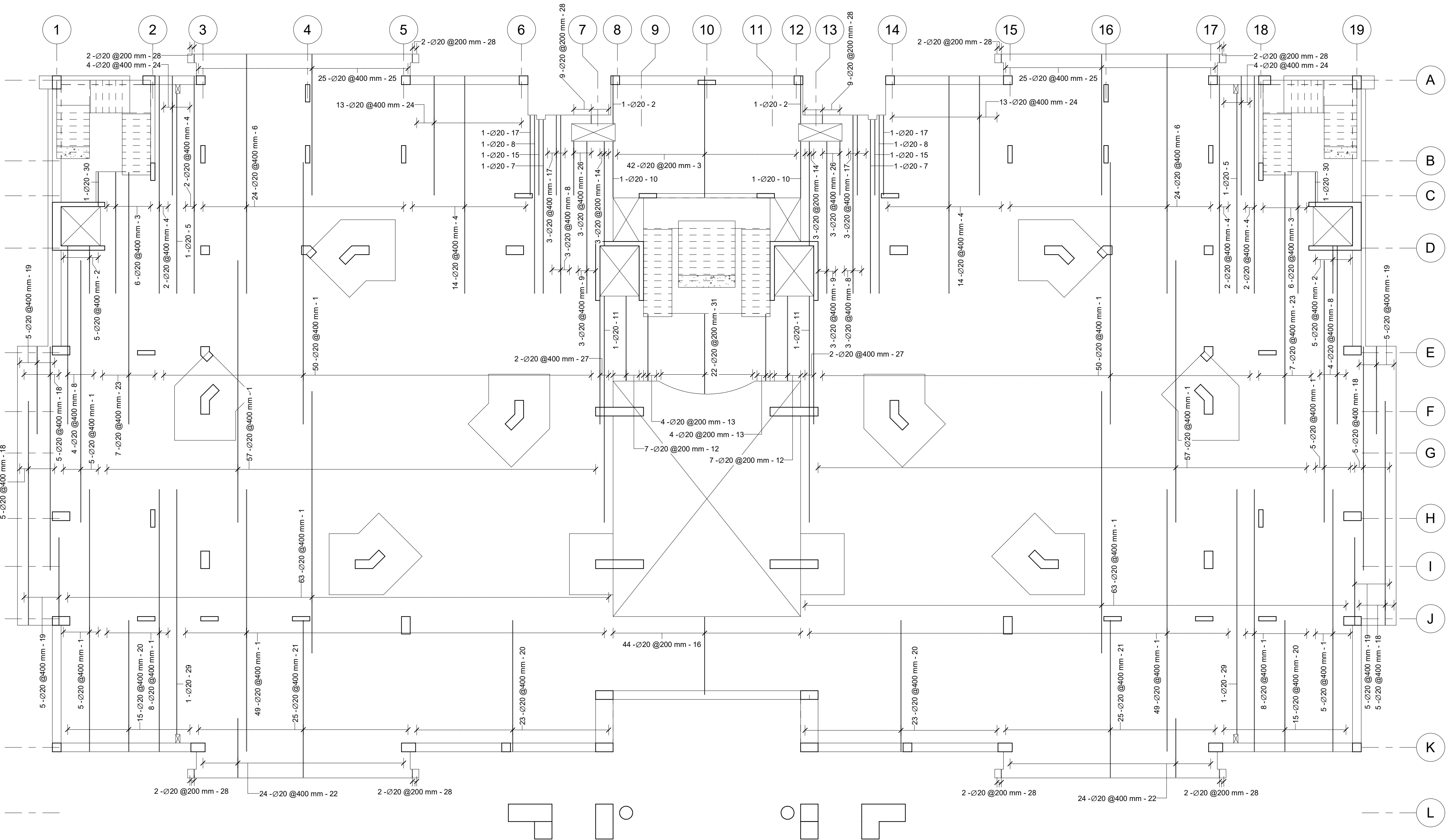


شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

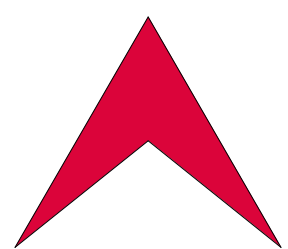
Rev.	AMENDMENT	DATE

Court of Benghazi North Benghazi Ground Floor Slab Main Bottom Reinforcement (Minor Direction)		ST-RT-43-00
SCALE:	1 : 100	DATE: February 2021
DESIGNED:	Refaat Elburki	
DRAWN:	Awad Edrees	

Ground Floor Slab Main Top Reinforcement (Major Direction) Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	474	12000 mm	5688 m	12000 mm	14027	
2	20 mm	12	2150 mm	26 m	2150 mm	64	
3	20 mm	54	5550 mm	300 m	5550 mm	739	
4	20 mm	36	9950 mm	358 m	9950 mm	883	
5	20 mm	2	9150 mm	18 m	9150 mm	45	
6	20 mm	48	10950 mm	526 m	10950 mm	1296	
7	20 mm	2	7950 mm	16 m	7950 mm	39	
8	20 mm	16	8150 mm	130 m	8150 mm	322	
9	20 mm	6	6950 mm	42 m	6950 mm	103	
10	20 mm	2	2550 mm	5 m	2550 mm	13	
11	20 mm	2	10350 mm	21 m	10350 mm	51	
12	20 mm	14	3850 mm	54 m	3850 mm	133	
13	20 mm	8	3050 mm	24 m	3050 mm	60	
14	20 mm	6	4750 mm	29 m	4750 mm	70	
15	20 mm	2	3450 mm	7 m	3450 mm	17	
16	20 mm	44	3550 mm	156 m	3550 mm	385	
17	20 mm	8	3650 mm	29 m	3650 mm	72	
18	20 mm	20	10250 mm	205 m	10250 mm	506	
19	20 mm	20	4000 mm	80 m	4000 mm	197	
20	20 mm	76	6000 mm	456 m	6000 mm	1125	
21	20 mm	50	7200 mm	360 m	7200 mm	888	
22	20 mm	48	2700 mm	130 m	2700 mm	320	
23	20 mm	14	11550 mm	162 m	11550 mm	399	
24	20 mm	34	5450 mm	185 m	5450 mm	457	
25	20 mm	50	6450 mm	323 m	6450 mm	795	
26	20 mm	6	2450 mm	15 m	2450 mm	36	
27	20 mm	4	5850 mm	23 m	5850 mm	58	
28	20 mm	34	350 mm	12 m	350 mm	29	
29	20 mm	2	11200 mm	22 m	11200 mm	55	
30	20 mm	2	1550 mm	3 m	1550 mm	8	
31	20 mm	22	Variable	76 m	Variable	187	
		1118		9480 m		23379	



1 Ground Floor Slab Main Top Reinforcement (Major Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

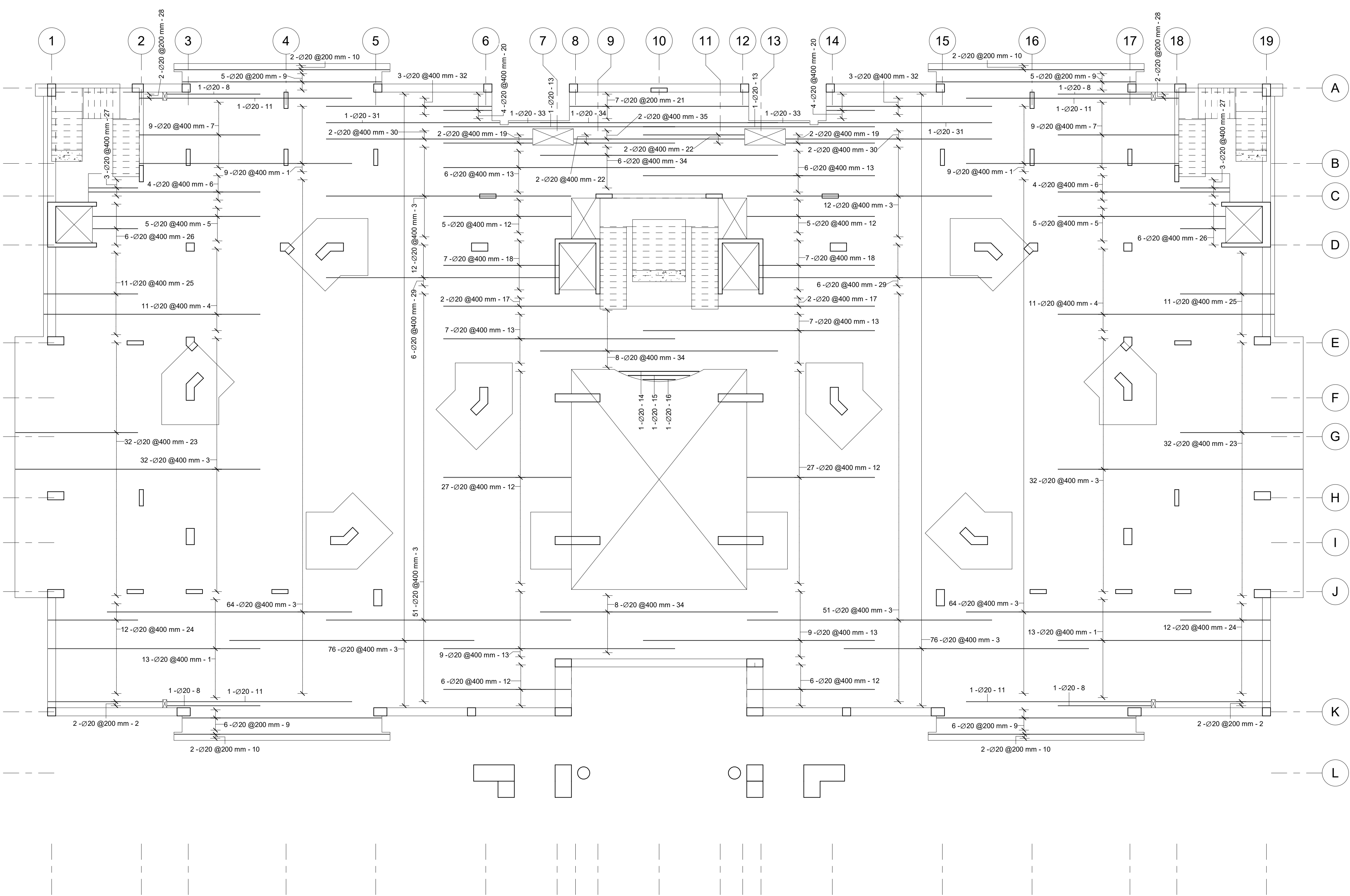
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Ground Floor Slab Main Top Reinforcement (Major Direction)
SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

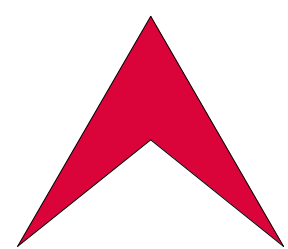
DATE: February 2021

ST-RT-44-00

Ground Floor Slab Main Top Reinforcement (Minor Direction) Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	44	10400 mm	458 m	10400 mm	1129
2	20 mm	4	5600 mm	22 m	5600 mm	55
3	20 mm	470	12000 mm	5640 m	12000 mm	13909
4	20 mm	22	10600 mm	233 m	10600 mm	575
5	20 mm	10	8200 mm	82 m	8200 mm	202
6	20 mm	8	8400 mm	67 m	8400 mm	166
7	20 mm	18	5900 mm	106 m	5900 mm	262
8	20 mm	4	4550 mm	18 m	4550 mm	45
9	20 mm	22	9750 mm	215 m	9750 mm	529
10	20 mm	8	10550 mm	84 m	10550 mm	208
11	20 mm	4	9050 mm	36 m	9050 mm	89
12	20 mm	76	6250 mm	475 m	6250 mm	1171
13	20 mm	46	11350 mm	522 m	11350 mm	1288
14	20 mm	2	3930 mm	8 m	3930 mm	19
15	20 mm	2	3030 mm	6 m	3030 mm	15
16	20 mm	2	1600 mm	3 m	1600 mm	8
17	20 mm	4	7650 mm	31 m	7650 mm	75
18	20 mm	14	5650 mm	79 m	5650 mm	195
19	20 mm	4	4350 mm	17 m	4350 mm	43
20	20 mm	8	2350 mm	19 m	2350 mm	46
21	20 mm	7	8750 mm	61 m	8750 mm	151
22	20 mm	4	4950 mm	20 m	4950 mm	49
23	20 mm	64	6000 mm	384 m	6000 mm	947
24	20 mm	24	4400 mm	106 m	4400 mm	260
25	20 mm	22	4600 mm	101 m	4600 mm	250
26	20 mm	12	2200 mm	26 m	2200 mm	65
27	20 mm	6	2400 mm	14 m	2400 mm	36
28	20 mm	4	1100 mm	4 m	1100 mm	11
29	20 mm	12	11400 mm	137 m	11400 mm	337
30	20 mm	4	10100 mm	40 m	10100 mm	100
31	20 mm	2	8500 mm	17 m	8500 mm	42
32	20 mm	6	8100 mm	49 m	8100 mm	120
33	20 mm	2	3000 mm	6 m	3000 mm	15
34	20 mm	23	11650 mm	268 m	11650 mm	661
35	20 mm	2	8350 mm	17 m	8350 mm	41
		966		9373 m		23114



1 Ground Floor Slab Main Top Reinforcement (Minor Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Ground Floor Slab Main Top Reinforcement (Minor Direction)
SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

DATE: February 2021

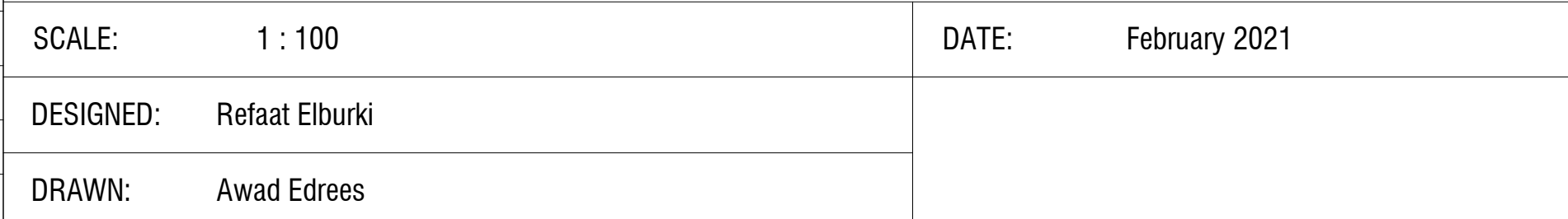
ST-RT-45-00

Structural drawing of a reinforced concrete slab with a grid of 19 columns and 12 rows. The drawing shows the layout of reinforcement bars (Ø16) for the slab, including top and bottom bars, and the placement of columns and walls. The drawing is labeled with column numbers 1 through 19 and row letters A through L. The drawing also includes a north arrow and a scale bar.

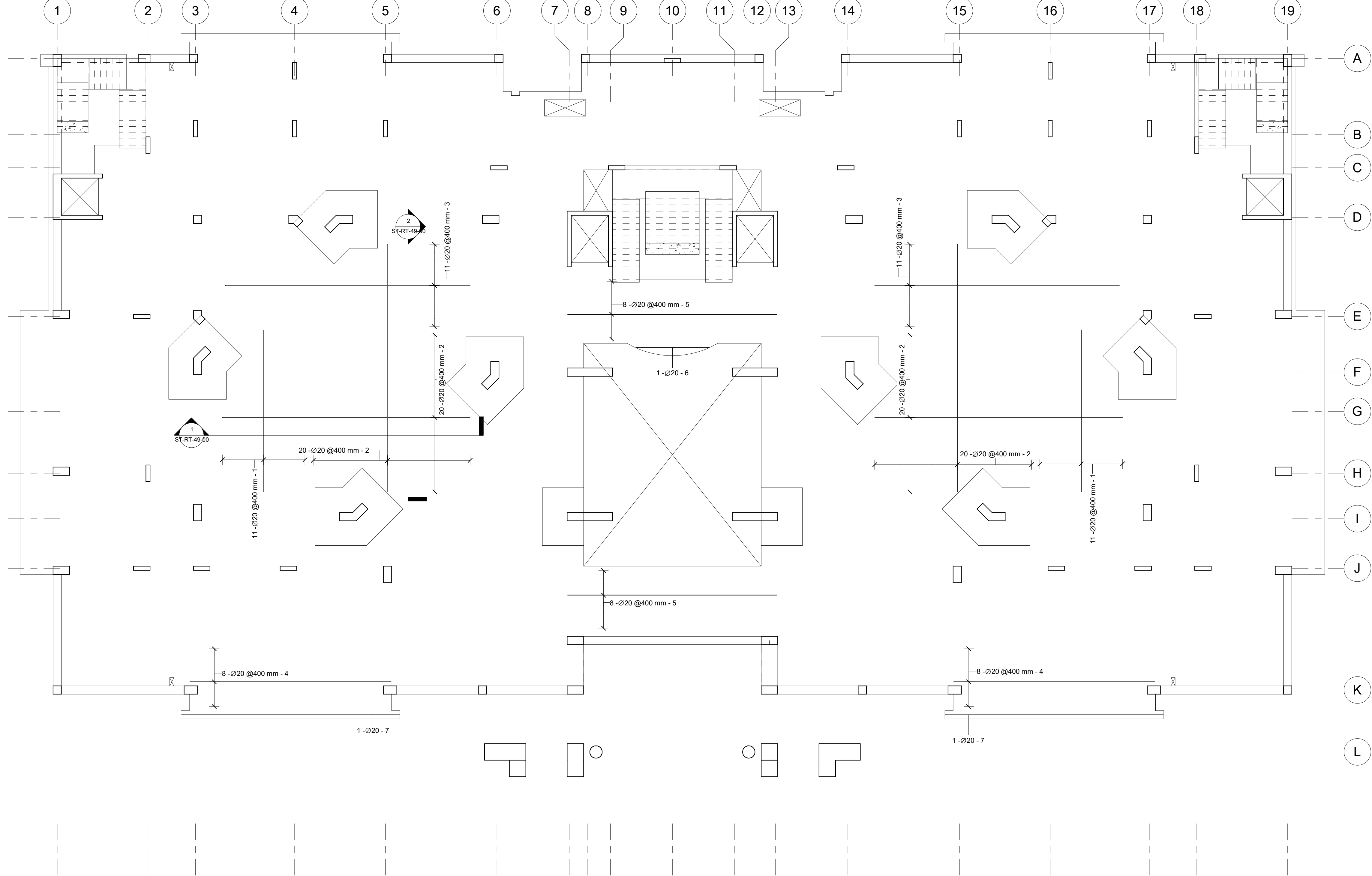
Reinforcement details include:

- Top bars: 2-Ø16 @200 mm - 2, 1-Ø16 - 1, 2-Ø16 @200 mm - 2, 3-Ø16 @200 mm - 2, 49-Ø16 @200 mm - 1, 2-Ø16 @200 mm - 2, 3-Ø16 @200 mm - 2, 6-Ø16 @200 mm - 1, 9-Ø16 @200 mm - 2, 7-Ø16 @200 mm - 1, 10-Ø16 @200 mm - 2, 15-Ø16 @200 mm - 2, 43-Ø16 @200 mm - 1, 49-Ø16 @200 mm - 1, 2-Ø16 @200 mm - 2, 4-Ø16 @200 mm - 2, 49-Ø16 @200 mm - 1, 2-Ø16 @200 mm - 2.
- Bottom bars: 6-Ø16 @200 mm - 1, 7-Ø16 @200 mm - 2, 7-Ø16 @200 mm - 2, 6-Ø16 @200 mm - 1, 11-Ø16 @200 mm - 1, 4-Ø16 @200 mm - 2, 4-Ø16 @200 mm - 2, 11-Ø16 @200 mm - 1, 7-Ø16 @200 mm - 1, 7-Ø16 @200 mm - 1, 10-Ø16 @200 mm - 2, 9-Ø16 @200 mm - 1, 15-Ø16 @200 mm - 2, 10-Ø16 @200 mm - 1, 22-Ø16 @200 mm - 3, 10-Ø16 @200 mm - 1, 54-Ø16 @200 mm - 2, 54-Ø16 @200 mm - 2, 43-Ø16 @200 mm - 1, 4-Ø16 @200 mm - 2, 4-Ø16 @200 mm - 2, 49-Ø16 @200 mm - 1, 2-Ø16 @200 mm - 2, 4-Ø16 @200 mm - 2, 49-Ø16 @200 mm - 1, 2-Ø16 @200 mm - 2, 4-Ø16 @200 mm - 2, 49-Ø16 @200 mm - 1, 2-Ø16 @200 mm - 2.

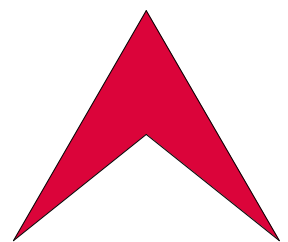
1 Ground Floor Slab Side Reinforcement
1 : 100



Ground Floor Slab Additional Bottom Reinforcement Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	22	7850 mm	173 m	7850 mm	426	
2	20 mm	80	12000 mm	960 m	12000 mm	2368	
3	20 mm	22	11850 mm	261 m	11850 mm	643	
4	20 mm	16	9750 mm	156 m	9750 mm	385	
5	20 mm	16	10150 mm	162 m	10150 mm	401	
6	20 mm	1	3520 mm	4 m	3520 mm	9	
7	20 mm	2	10550 mm	21 m	10550 mm	52	
		159		1736 m		4282	



1 Ground Floor Slab Additional Bottom Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية



Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Ground Floor Slab Additional Bottom Reinforcement

ST-RT-47-00

SCALE: 1 : 100

DATE: February 2021

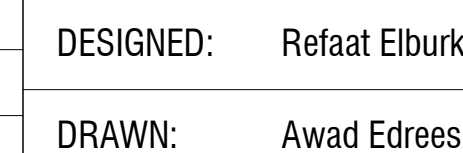
DESIGNED: Refaat Elburki

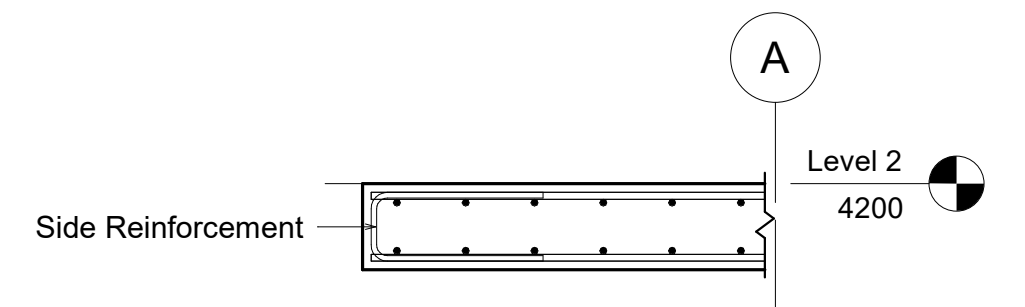
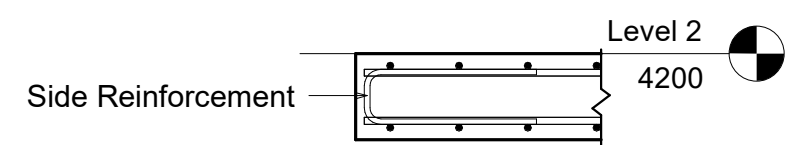
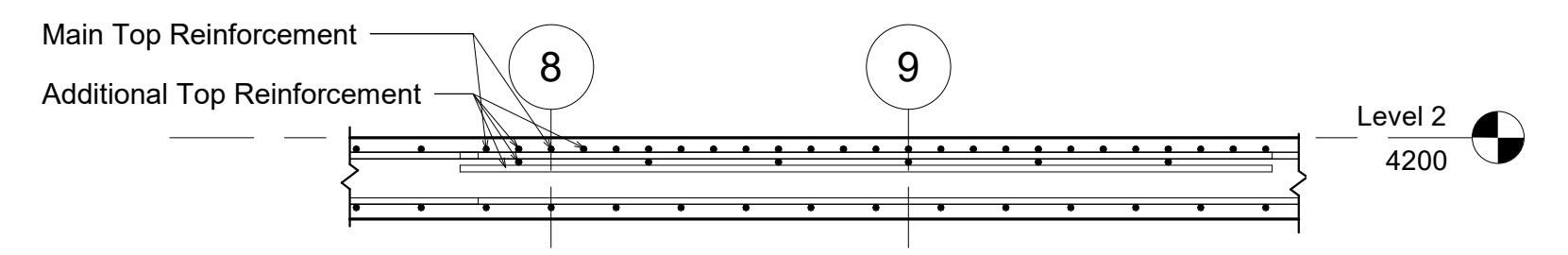
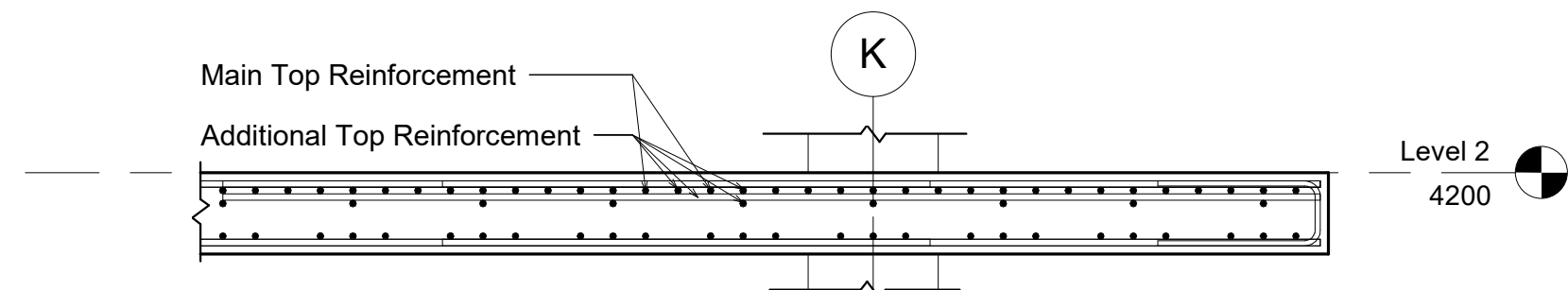
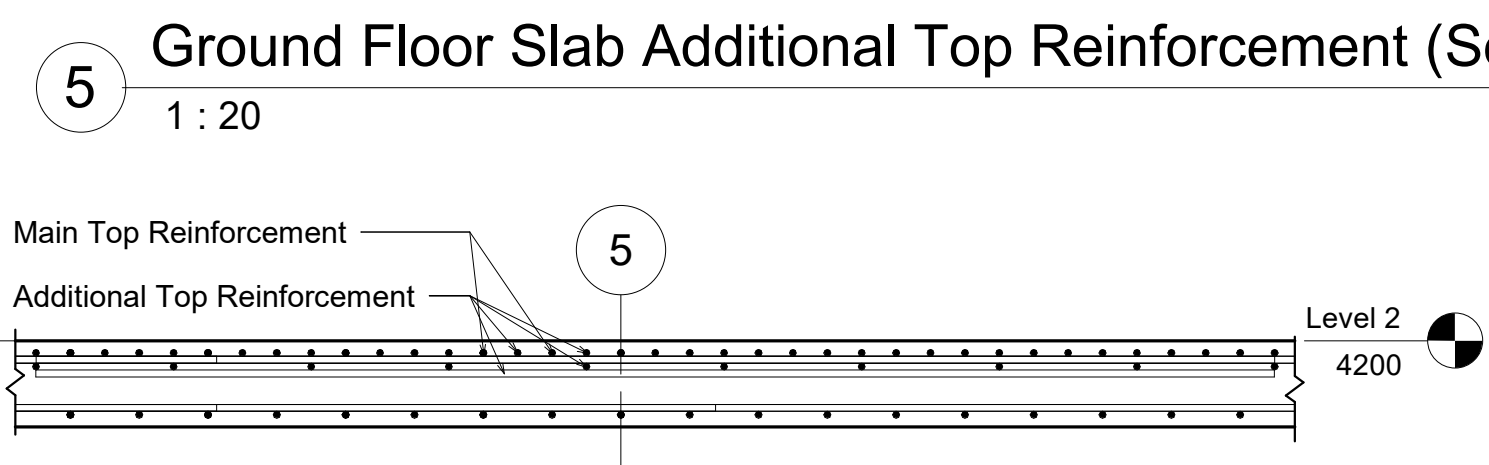
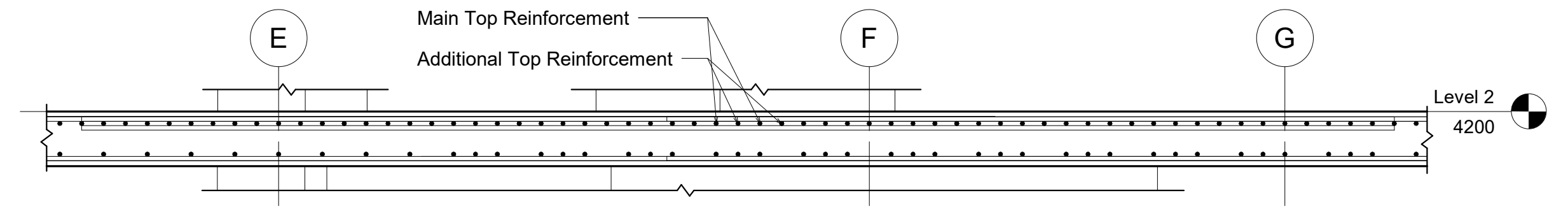
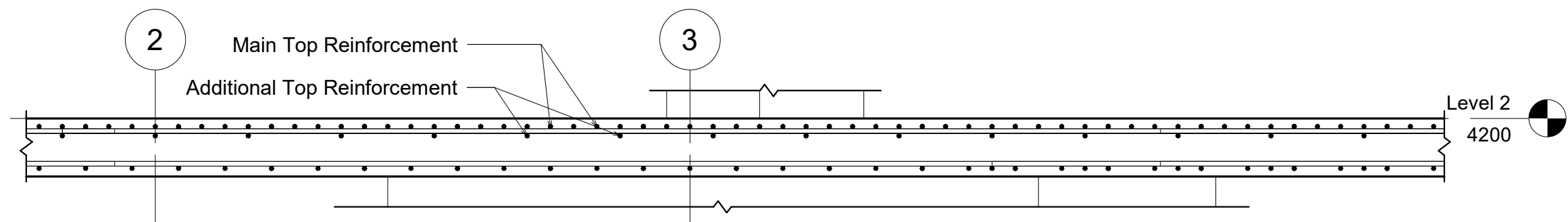
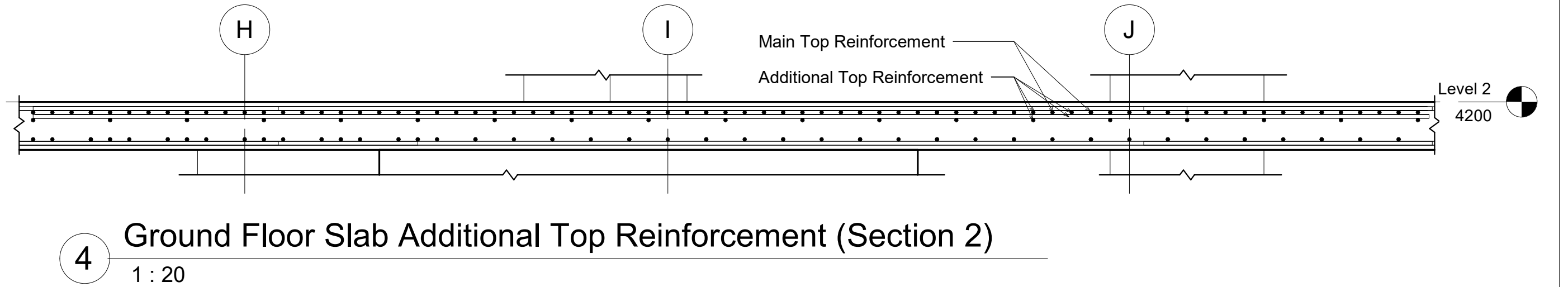
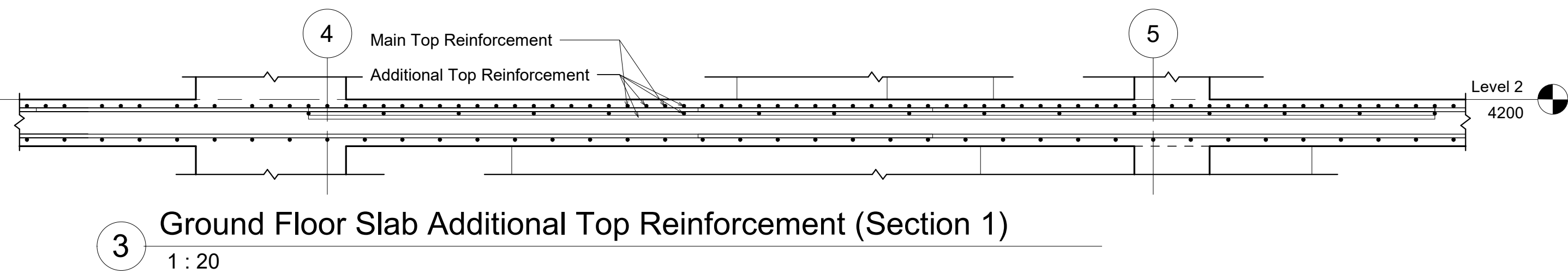
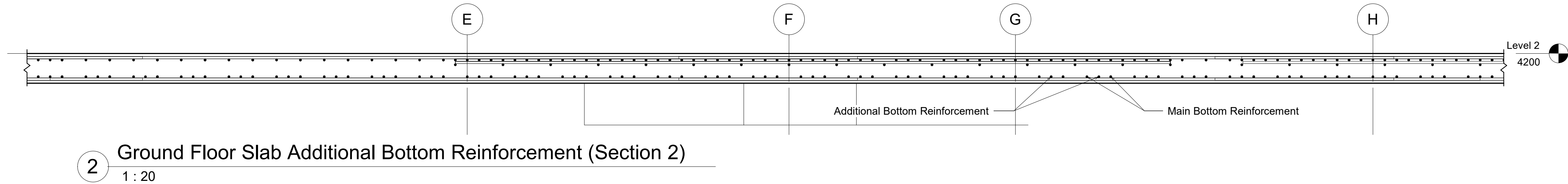
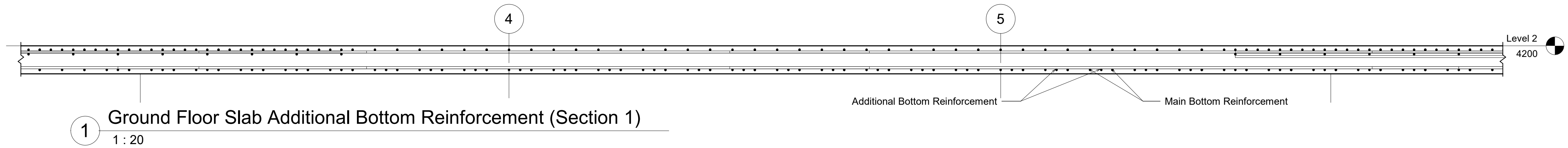
DRAWN: Awad Edrees

Architectural drawing of a reinforced concrete slab showing a grid of columns and beams. The drawing includes a grid of columns labeled 1 through 19 and A through L. Reinforcement bars are shown with their diameter, spacing, and length. Key features include:

- Grid lines 1-19 and A-L.
- Reinforcement bars labeled with diameter, spacing, and length (e.g., 31-Ø20 @200 mm - 1).
- Section cut symbols (e.g., ST-RT-49-40, ST-RT-49-40-10).
- Beam and column cross-sections.
- A central area with a large rectangular opening.

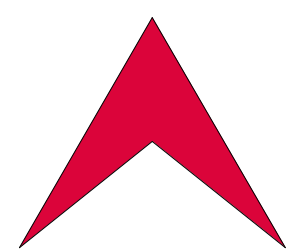
1 Ground Floor Slab Additional Top Reinforcement
1 : 100





11 Ground Floor Slab Side Reinforcement (Section 1)
1 : 20

12 Ground Floor Slab Side Reinforcement (Section 2)
1 : 20



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



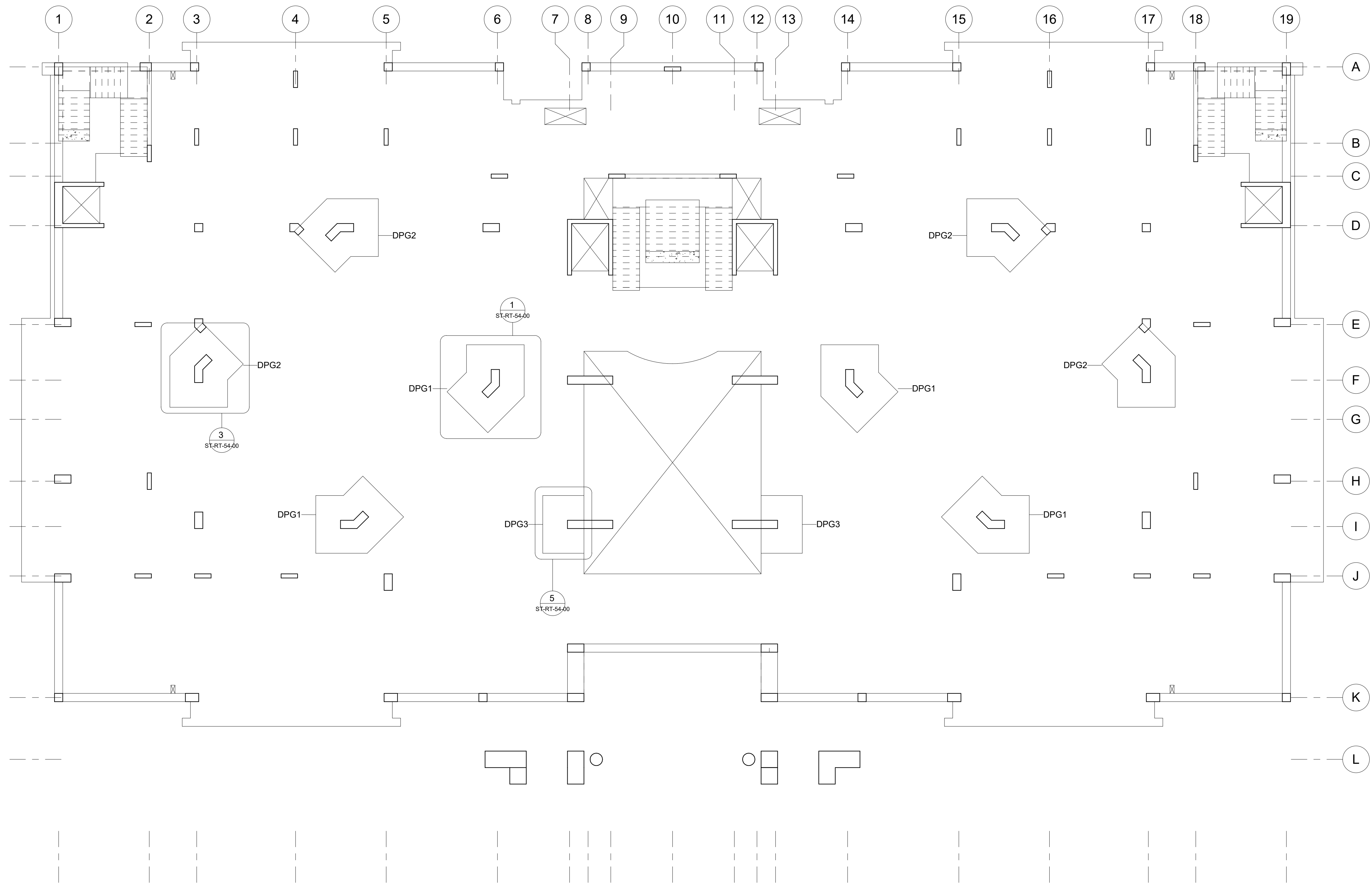
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi

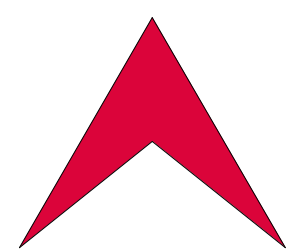
Ground Floor Slab Reinforcement Details

ST-RT-49-00

SCALE: 1 : 20	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



1 Ground Floor Slab Drop Panels Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



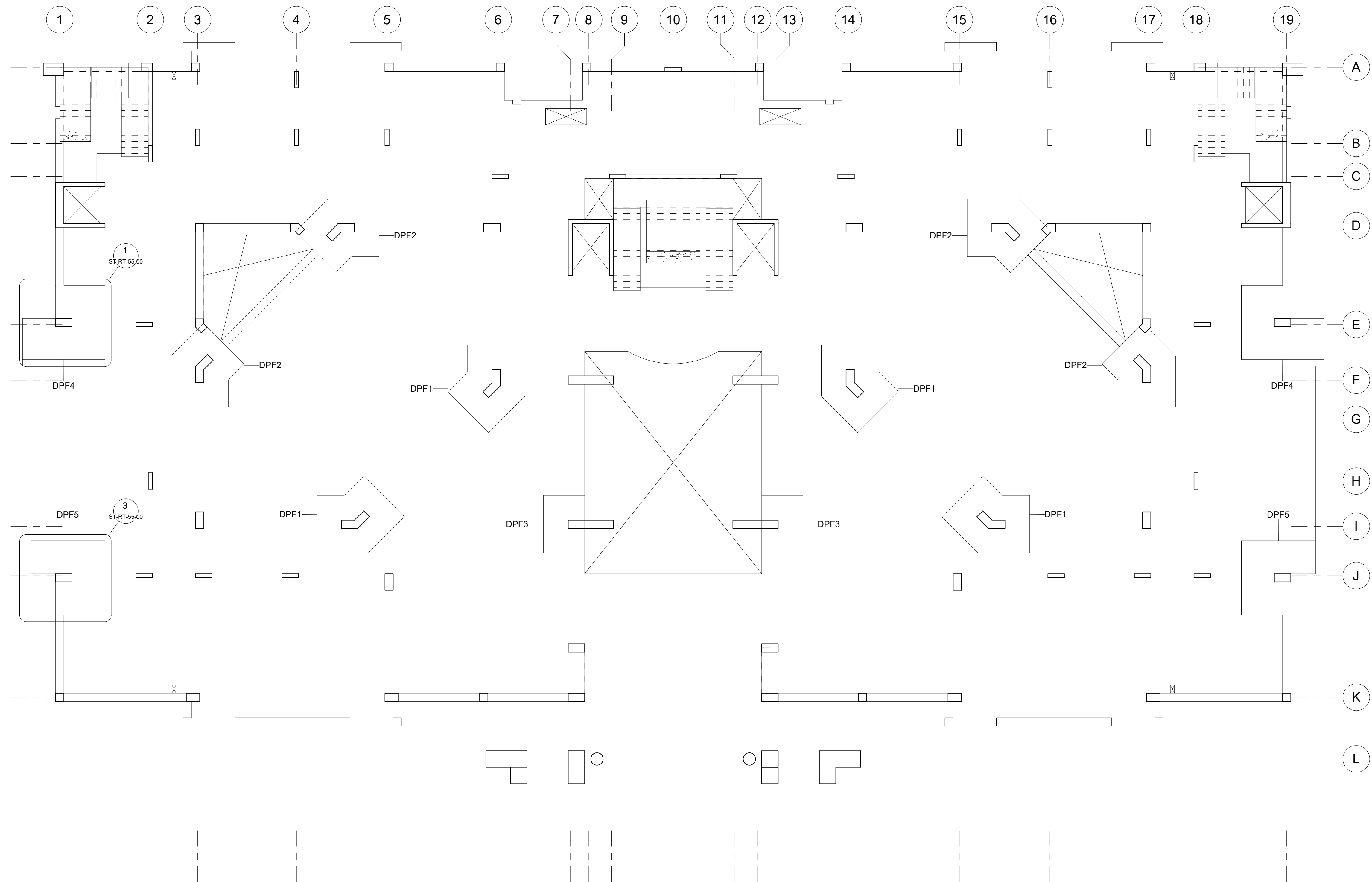
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

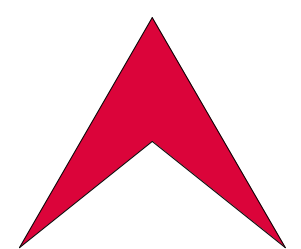
Court of Benghazi North
Benghazi
Ground Floor Slab Drop Panels Layout

ST-RT-50-00

SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



1 First Floor Drop Panels Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

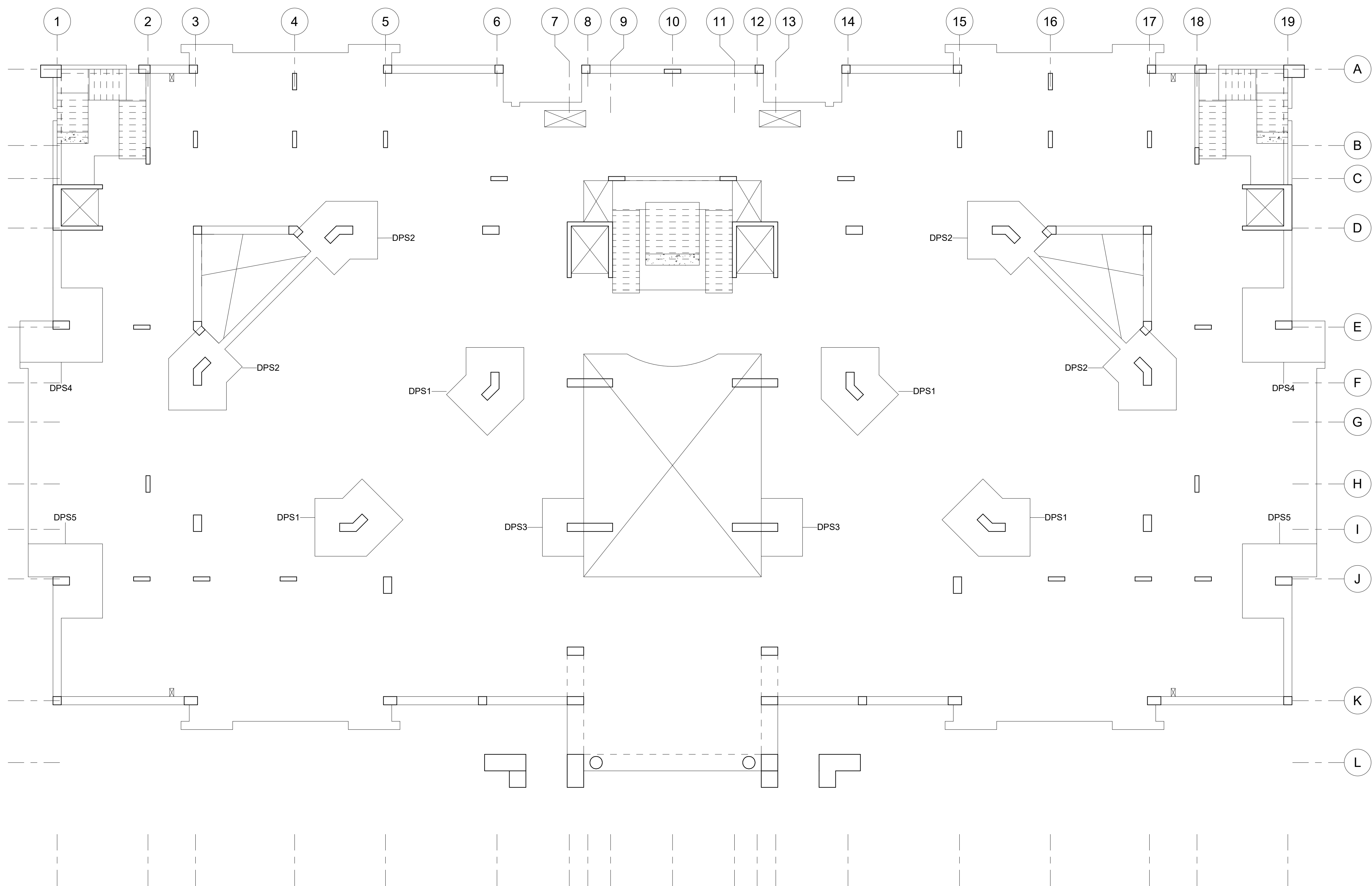


Rev.	AMENDMENT	DATE

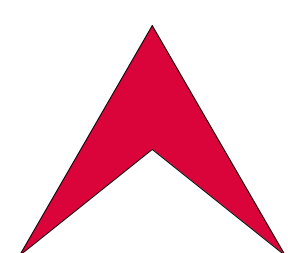
Court of Benghazi North
Benghazi
First Floor Drop Panels Layout

ST-RT-51-00

SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



1 Second Floor Drop Panels Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



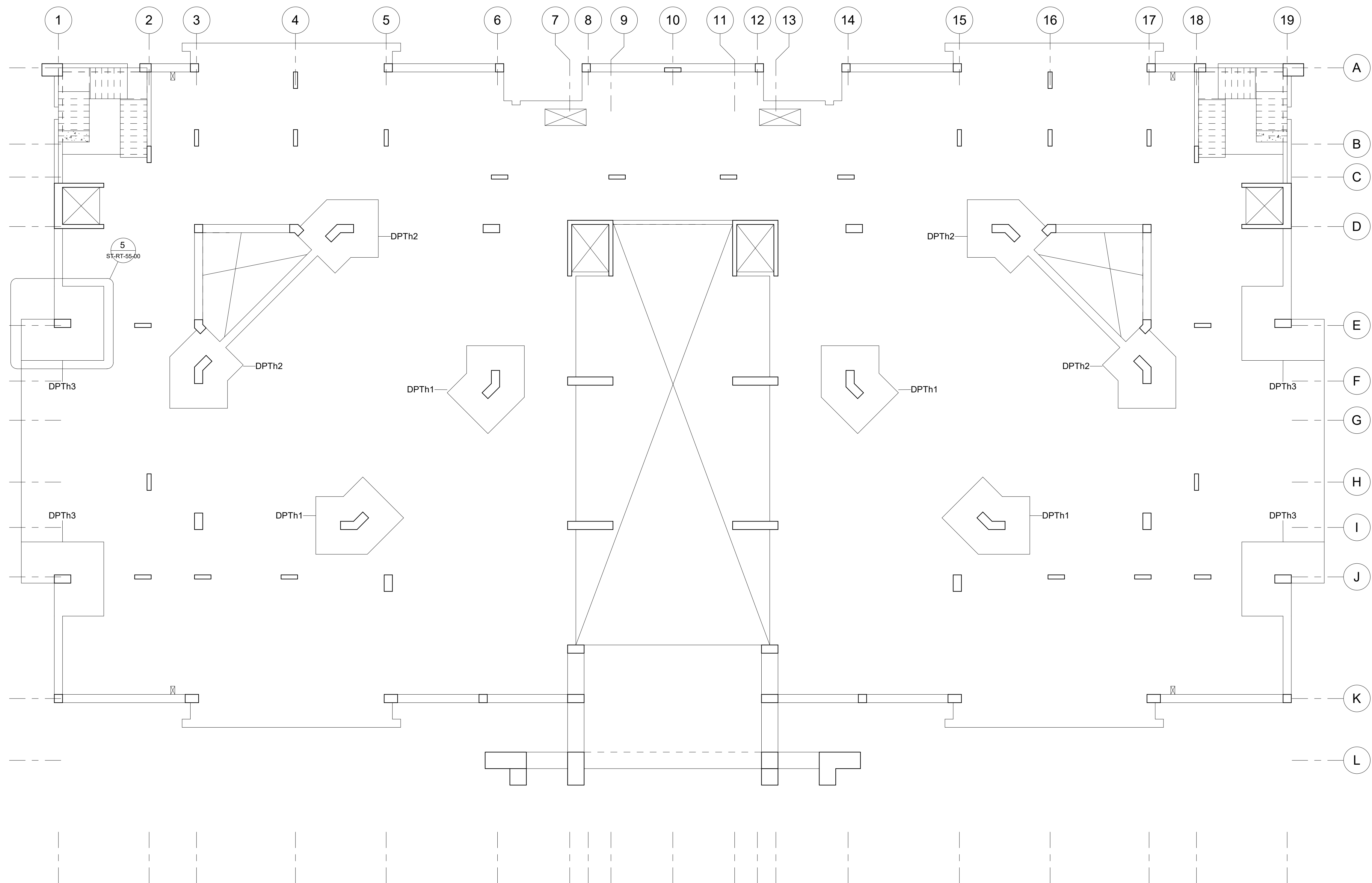
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

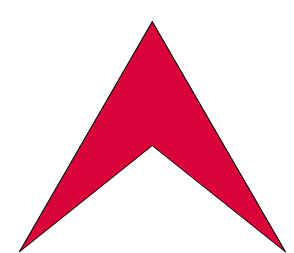
Court of Benghazi North
Benghazi
Second Floor Drop Panels Layout

ST-RT-52-00

SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



1 Third Floor Drop Panels Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



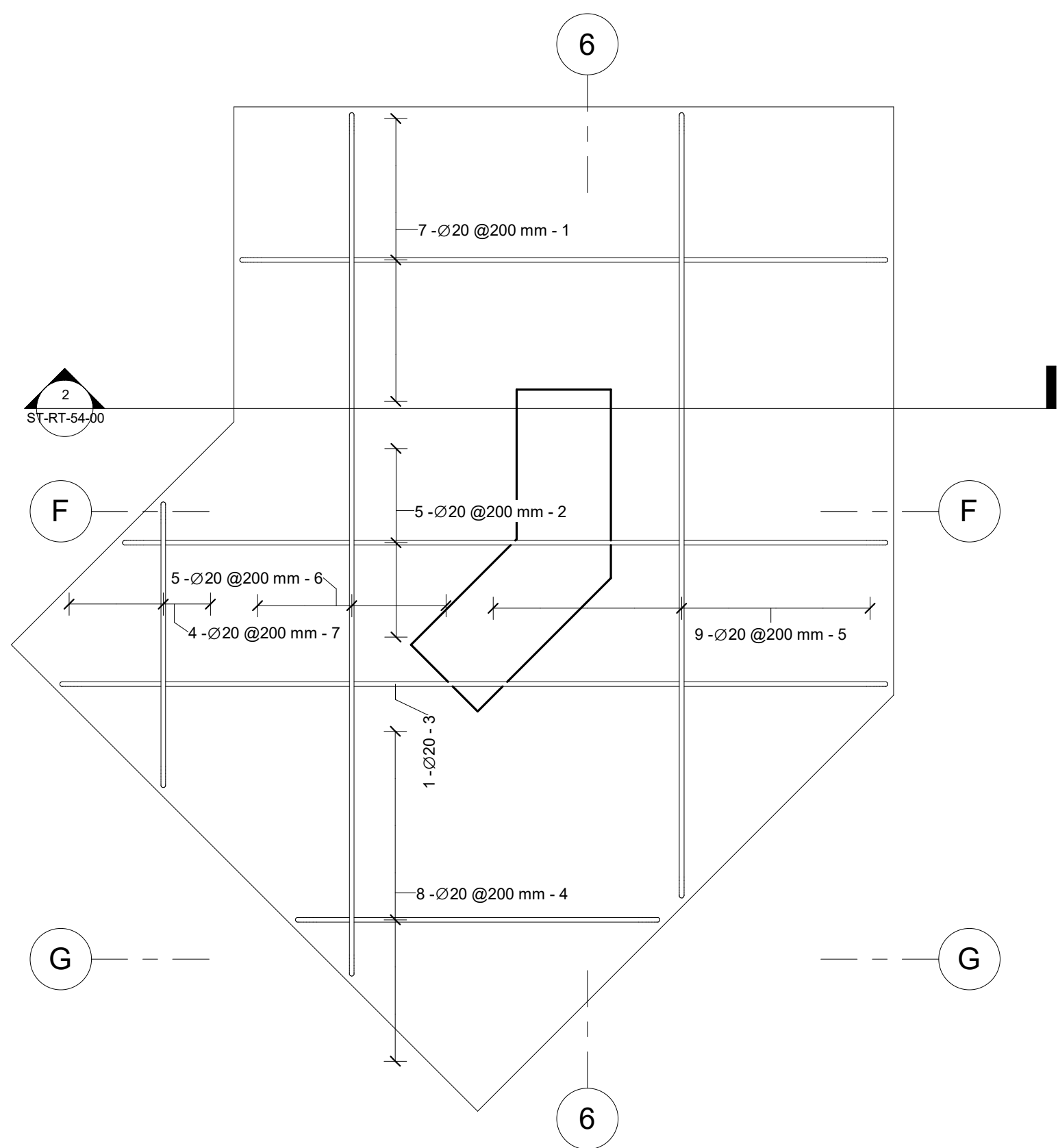
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

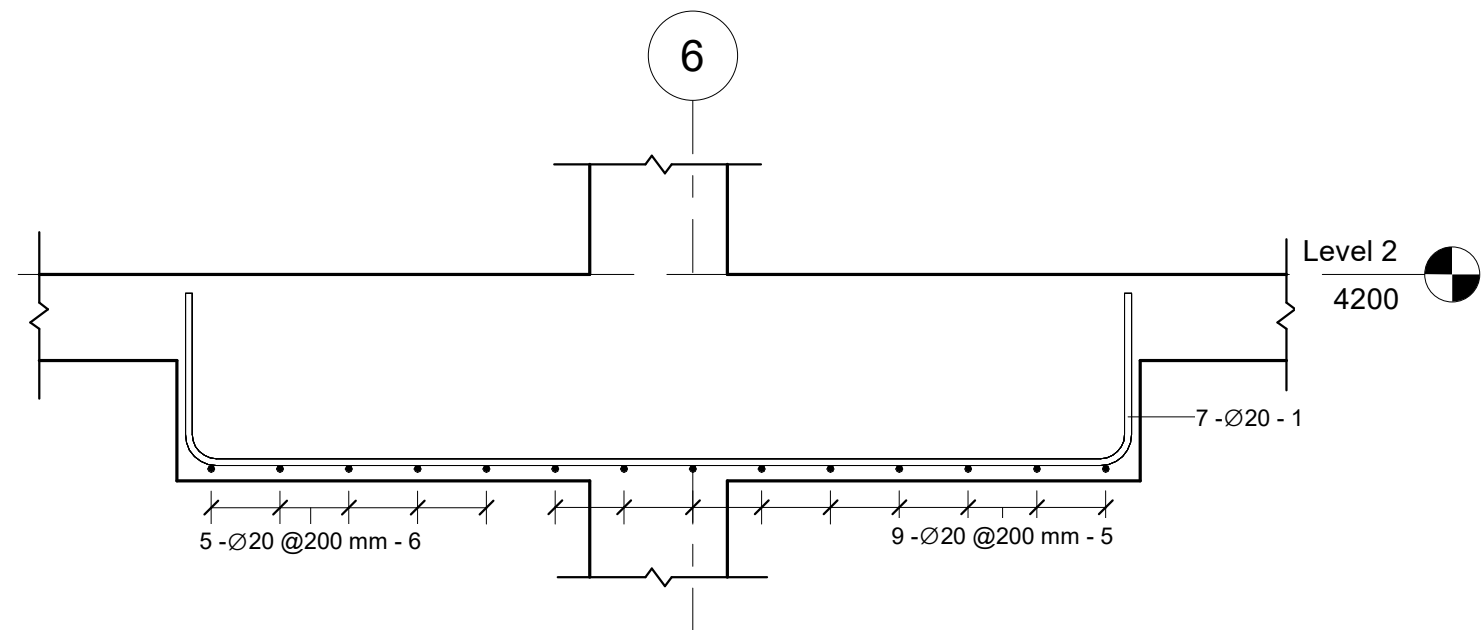
Court of Benghazi North
Benghazi
Third Floor Drop Panels Layout

ST-RT-53-00

SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	

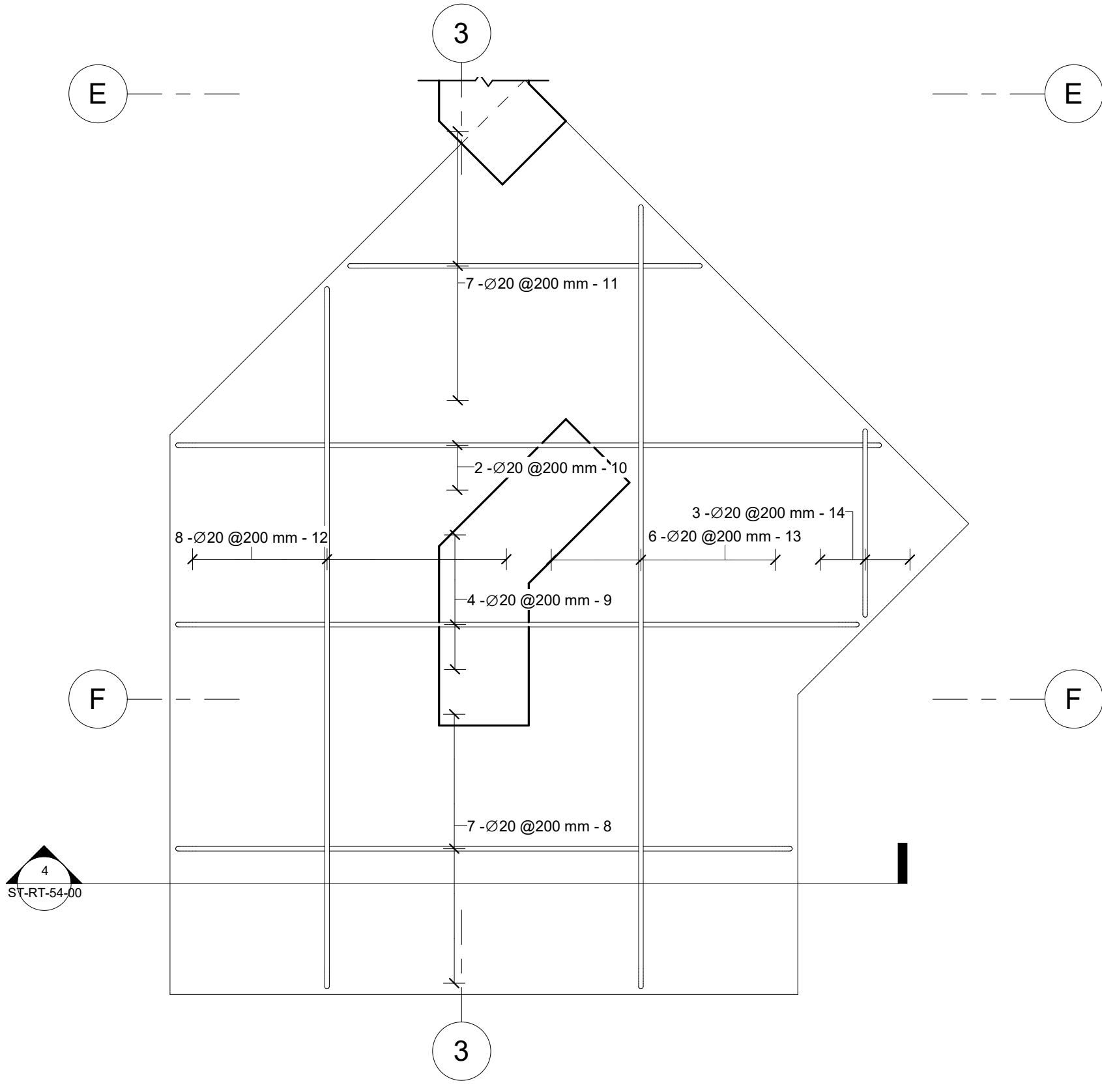


1 DPG1
1 : 20

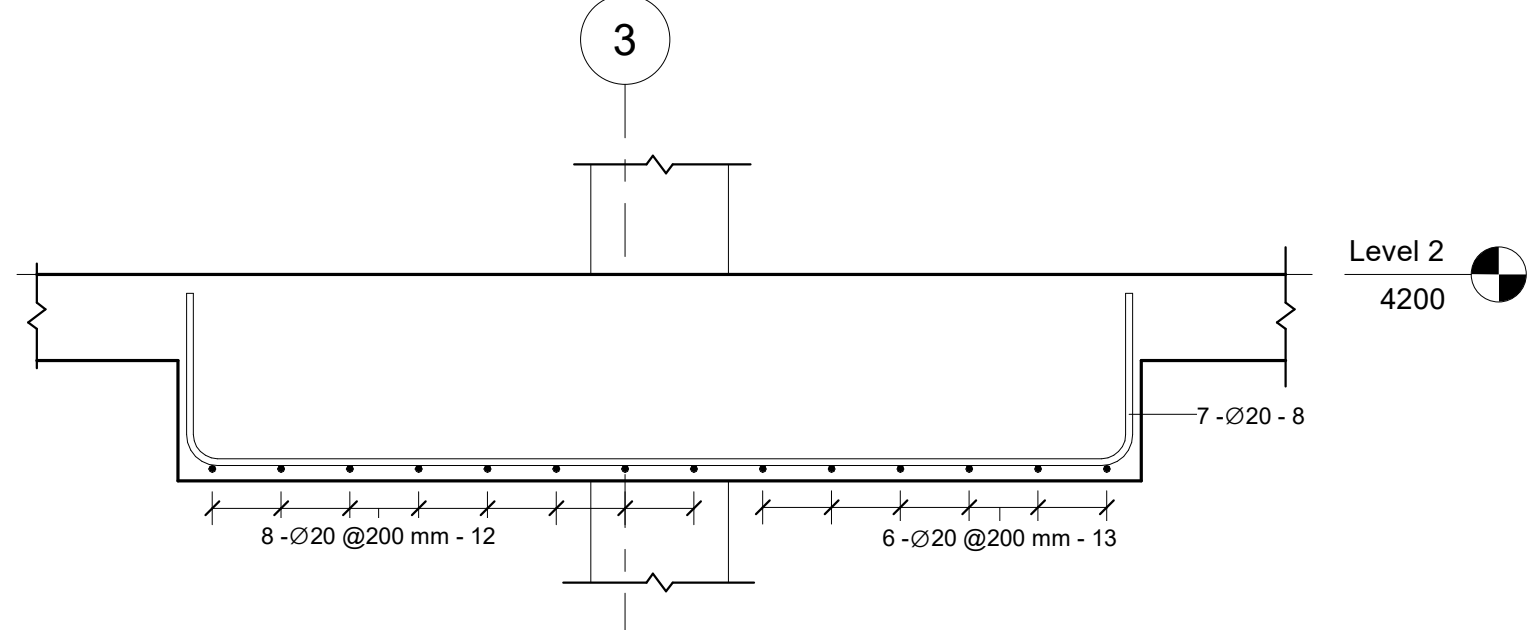


2 DPG1 (Section)
1 : 20

Drop Panels DPG1 , DPF1 , DPS1 & DPTH1 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 16 Drop Panels	Image
1	20 mm	7	3640 mm	25 m	500 mm	2750 mm	500 mm	63	1005	
2	20 mm	5		21 m	500 mm		500 mm	51	817	
3	20 mm	1	4410 mm	4 m	500 mm	3510 mm	500 mm	11	174	
4	20 mm	8		21 m	500 mm		500 mm	52	833	
5	20 mm	9		39 m	550 mm		550 mm	96	1536	
6	20 mm	5		23 m	550 mm		550 mm	57	918	
7	20 mm	4		8 m	550 mm		550 mm	20	316	
		39		142 m				350	5599	

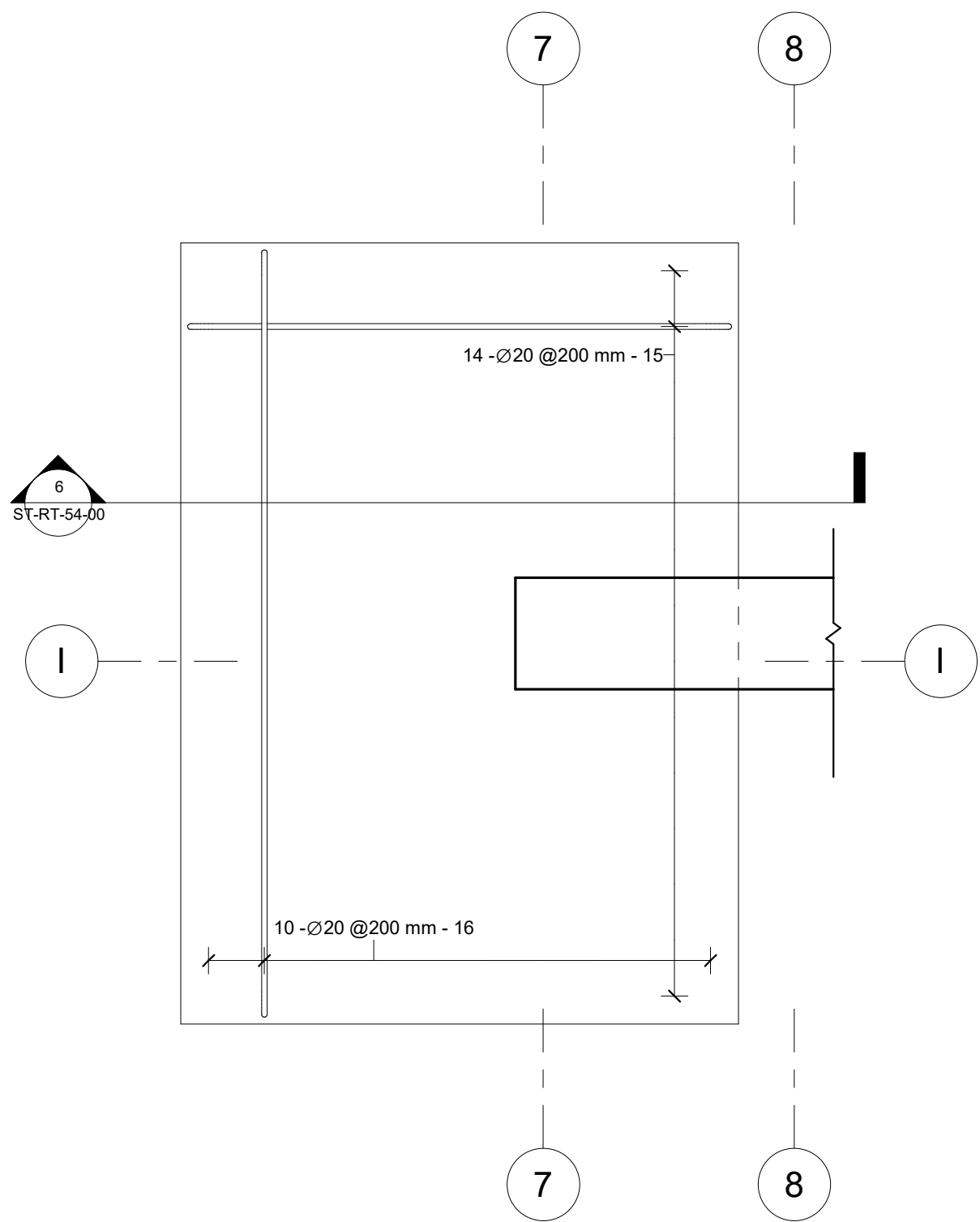


3 DPG2
1 : 20

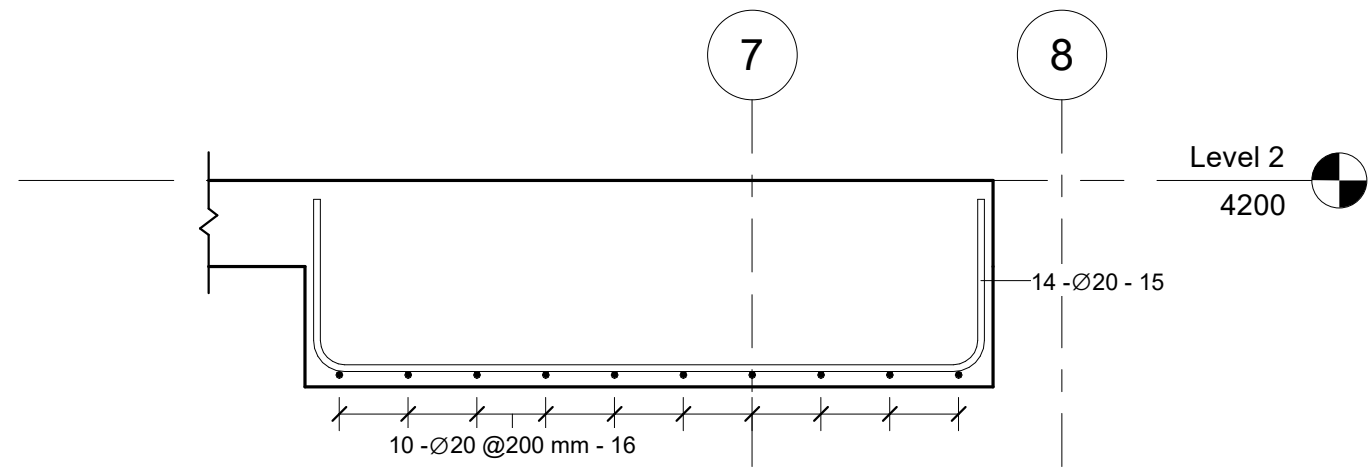


4 DPG2 (Section)
1 : 20

Drop Panels DPG2 , DPF2 , DPS2 & DPTH2 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 16 DropPanels	Image
8	20 mm	7	3640 mm	25 m	500 mm	2750 mm	500 mm	63	1005	
9	20 mm	4		16 m	500 mm		500 mm	40	638	
10	20 mm	2		8 m	500 mm		500 mm	20	327	
11	20 mm	7		17 m	500 mm		500 mm	43	683	
12	20 mm	8		33 m	500 mm		500 mm	81	1302	
13	20 mm	6		26 m	500 mm		500 mm	63	1015	
14	20 mm	3		5 m	500 mm		500 mm	13	205	
		37		131 m				323	5175	

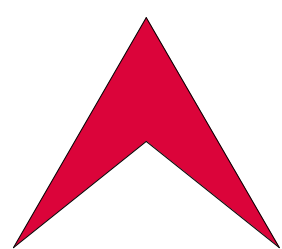


5 DPG3
1 : 20



6 DPG3 (Section)
1 : 20

Drop Panels DPG3 , DPF3 & DPS3 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 6 Drop Panels	Image
15	20 mm	14	2840 mm	40 m	500 mm	1950 mm	500 mm	98	588	
16	20 mm	10	3640 mm	36 m	500 mm	2750 mm	500 mm	90	539	
		24		76 m				188	1127	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi

Drop Panels Reinforcement (1)

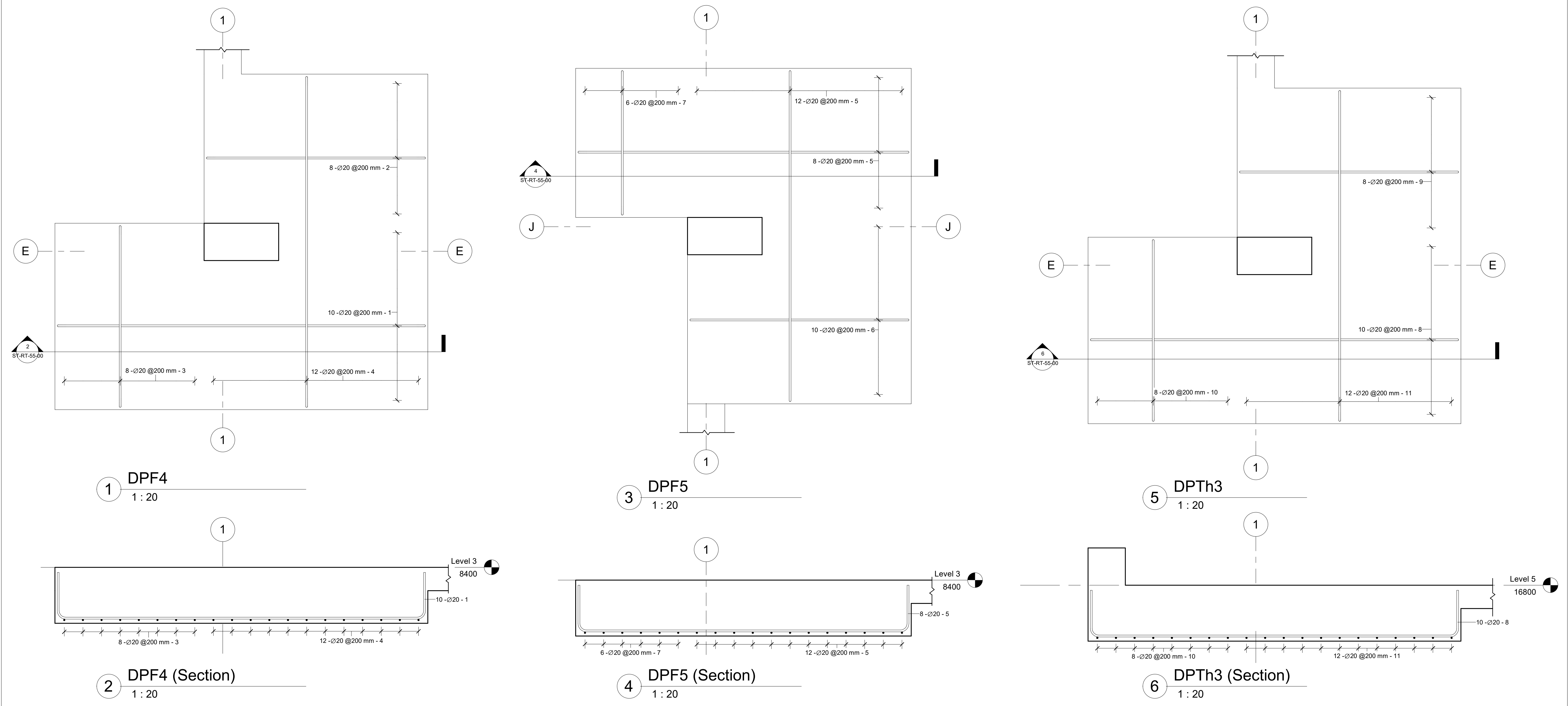
SCALE: 1 : 20

DESIGNED: Refaat Elburki

DRAWN: Awad Edrees

DATE: February 2021

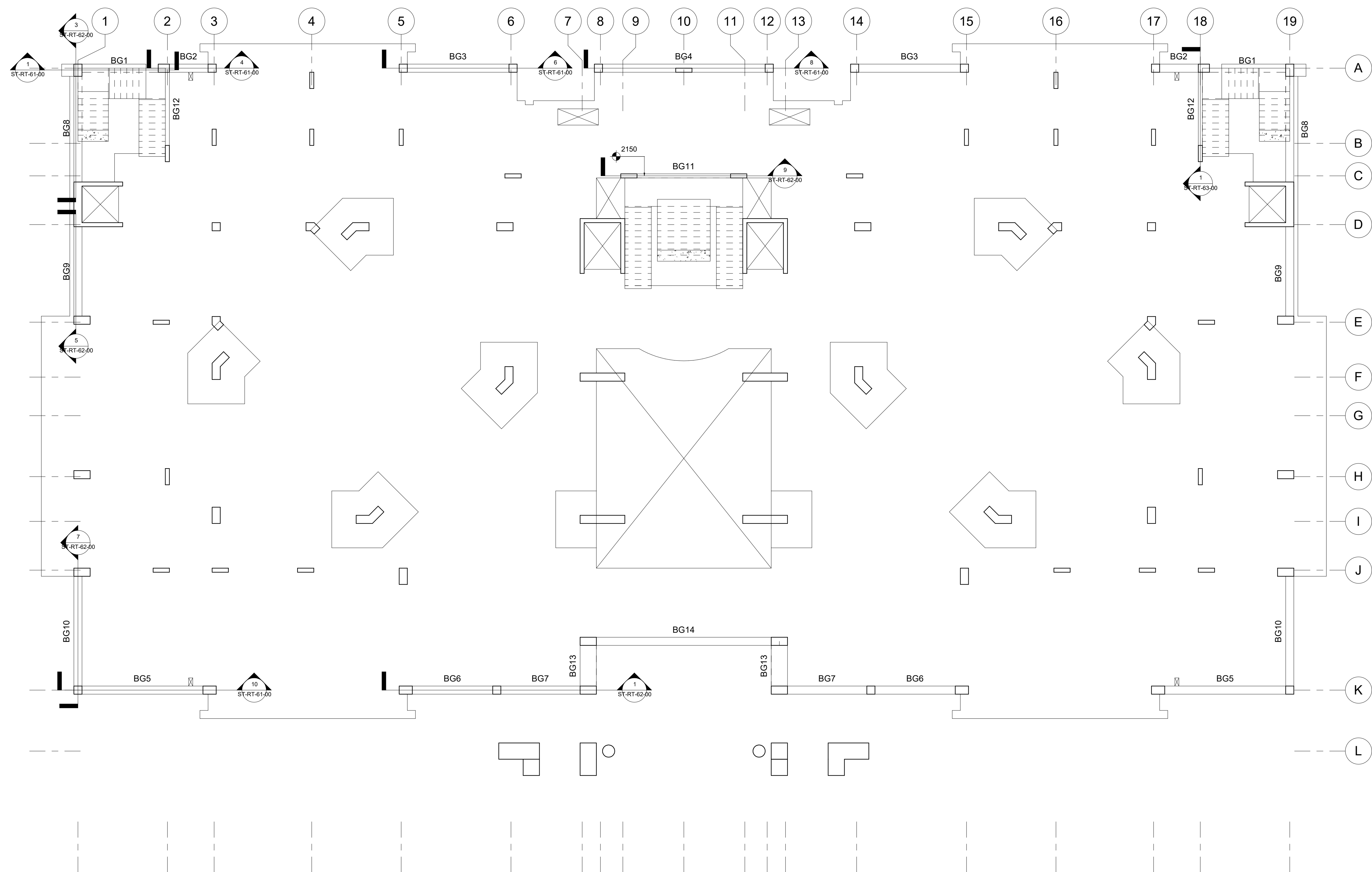
ST-RT-54-00



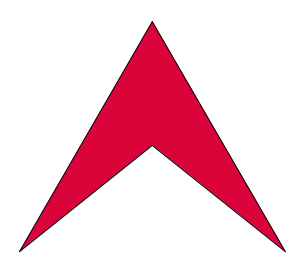
Drop Panels DPF4 & DPS4 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 4 Drop Panels	Image
1	20 mm	10	4840 mm	48 m	500 mm	3950 mm	500 mm	119	477	
2	20 mm	8	3240 mm	26 m	500 mm	2350 mm	500 mm	64	256	
3	20 mm	8	2840 mm	23 m	500 mm	1950 mm	500 mm	56	224	
4	20 mm	12	4440 mm	53 m	500 mm	3550 mm	500 mm	131	526	
		38		150 m				371	1483	

Drop Panels DPF5 & DPS5 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 4 Drop Panels	Image
5	20 mm	20	4440 mm	89 m	500 mm	3550 mm	500 mm	219	876	
6	20 mm	10	3240 mm	32 m	500 mm	2350 mm	500 mm	80	320	
7	20 mm	6	2440 mm	15 m	500 mm	1550 mm	500 mm	36	144	
		36		136 m				335	1340	

Drop Panel DPTH3 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 4 Drop Panels	Image
8	20 mm	10	4840 mm	48 m	500 mm	3950 mm	500 mm	119	477	
9	20 mm	8	3240 mm	26 m	500 mm	2350 mm	500 mm	64	256	
10	20 mm	8	2840 mm	23 m	500 mm	1950 mm	500 mm	56	224	
11	20 mm	12	4440 mm	53 m	500 mm	3550 mm	500 mm	131	526	
		38		150 m				371	1483	



1 Ground Floor Beams Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

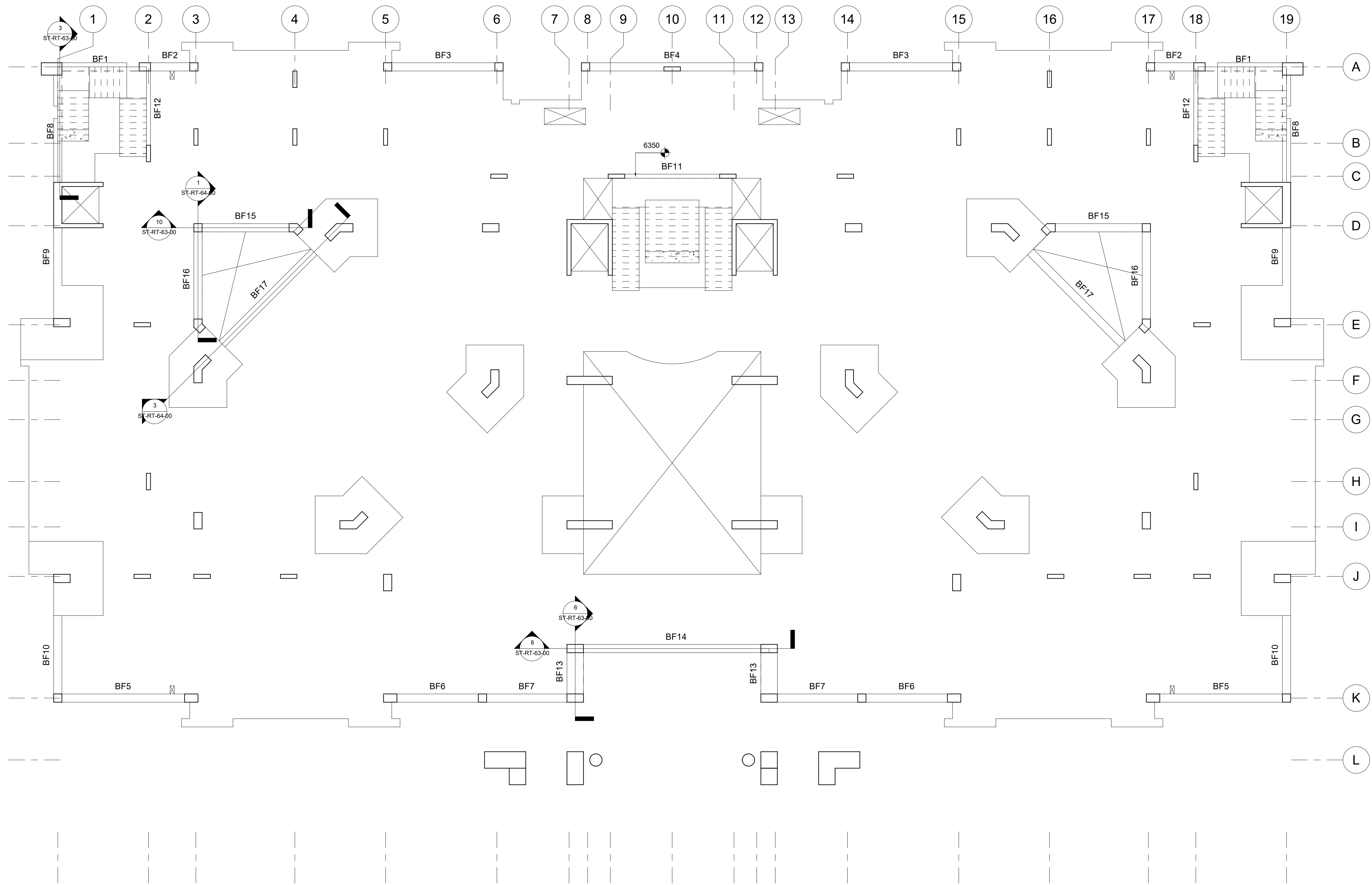


Rev.	AMENDMENT	DATE

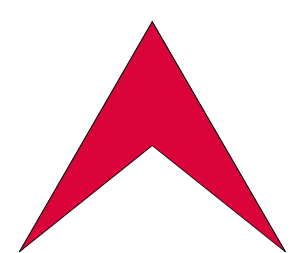
Court of Benghazi North
Benghazi
Ground Floor Beams Layout

ST-RT-56-00

SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



1 First Floor Beams Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



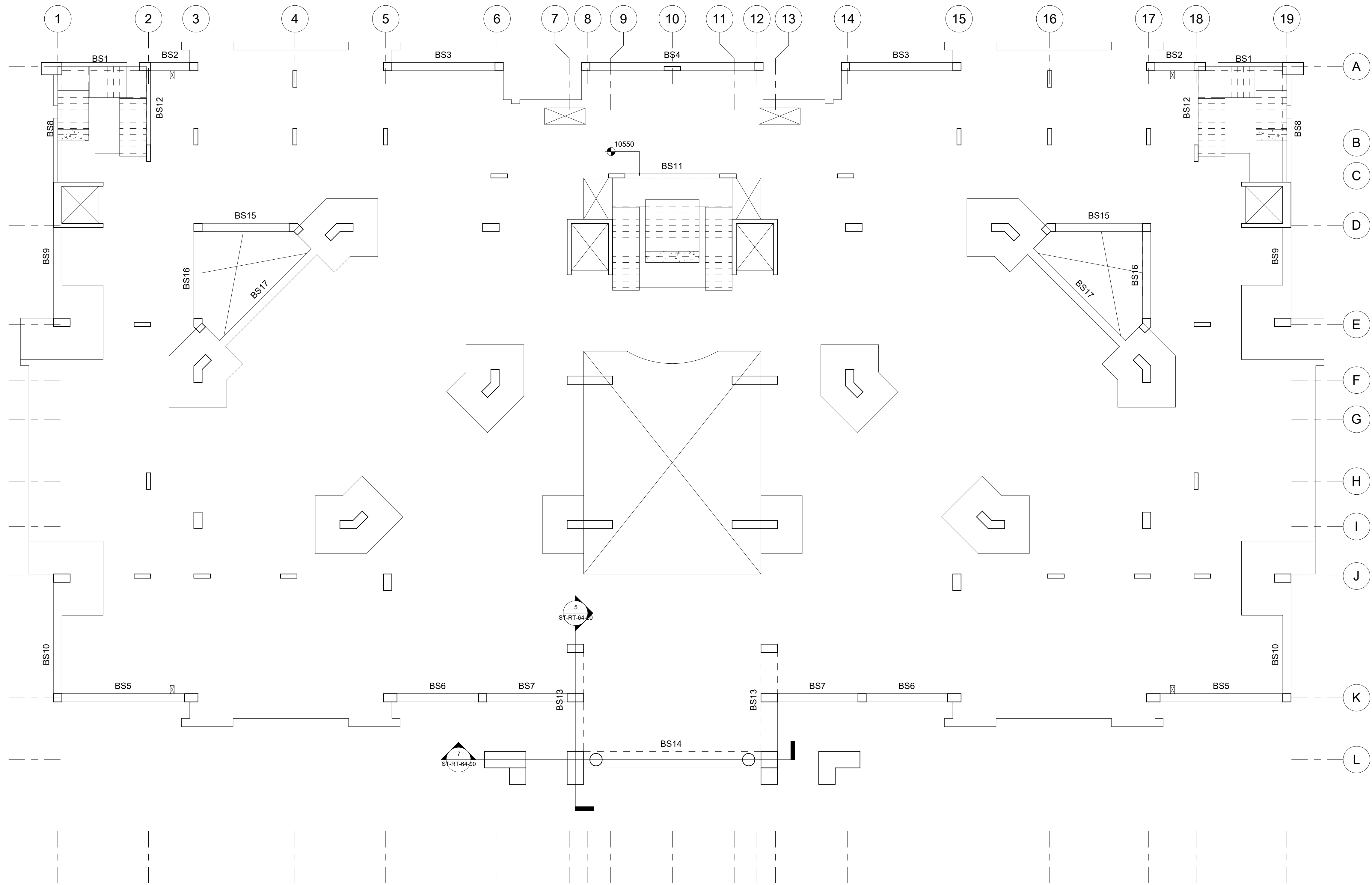
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

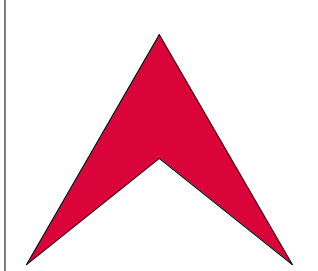
Court of Benghazi North
Benghazi
First Floor Beams Layout

ST-RT-57-00

SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



1 Second Floor Beams Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

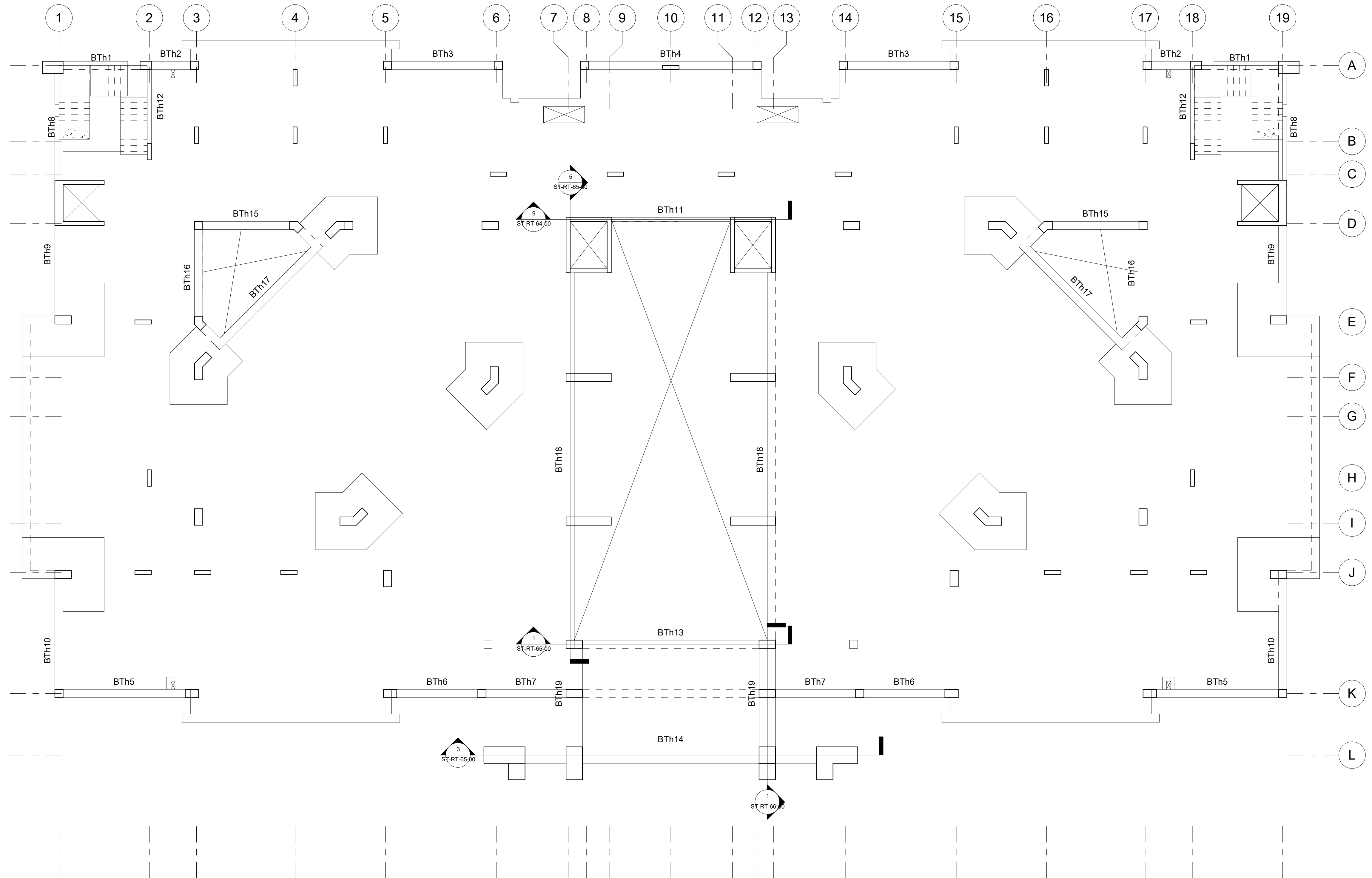
البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

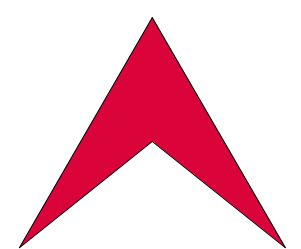


Rev.	AMENDMENT	DATE

Court of Benghazi North Benghazi Second Floor Beams Layout		ST-RT-58-00
SCALE: 1 : 100	DATE: February 2021	
DESIGNED: Refaat Elburki		
DRAWN: Awad Edrees		



1 Third Floor Beams Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

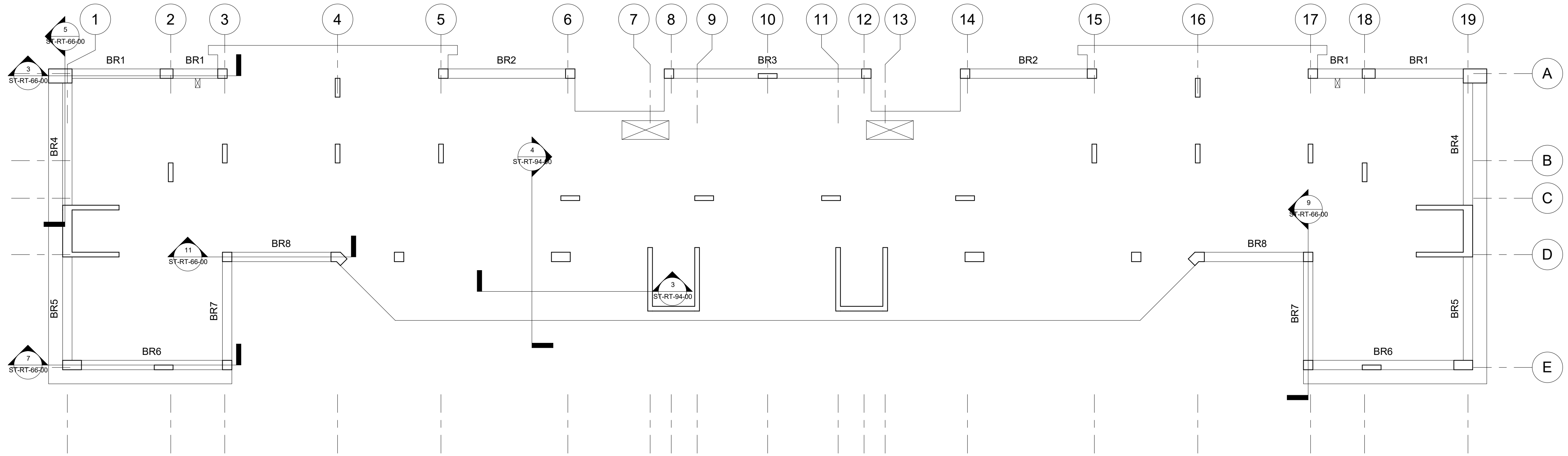
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Third Floor Beams Layout

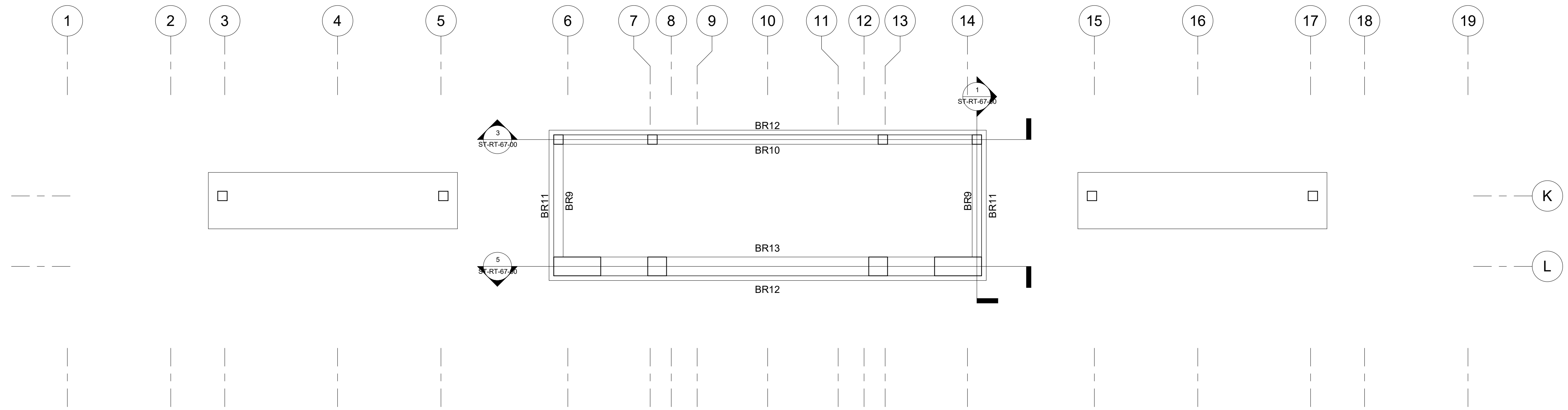
SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

DATE: February 2021

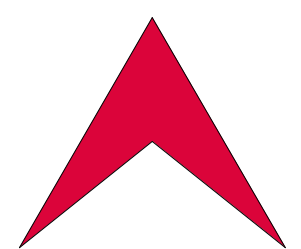
ST-RT-59-00



1 Roof Slab SR1 Beams Layout
1 : 100



2 Roof Slabs SR2 Beams Layout
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka
Jamal Abdalnasser st.
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

البركة

شارع جمال عبد الناصر

برج النعمان

بنغازي-ليبيا

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

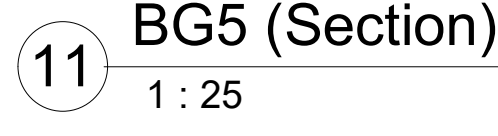
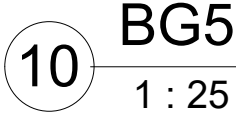
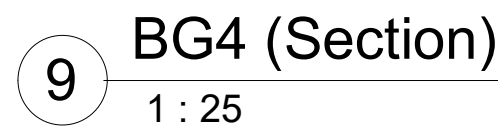
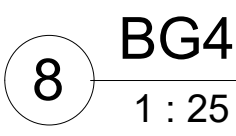
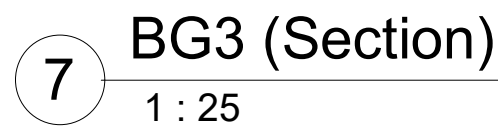
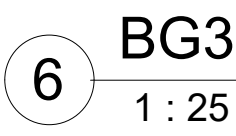
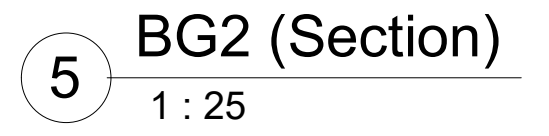
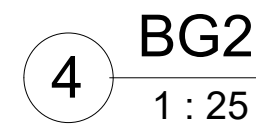
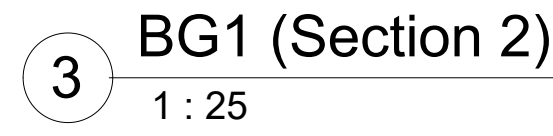
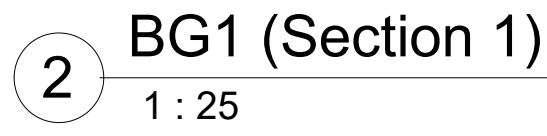
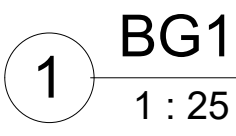


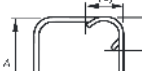
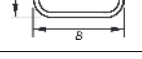
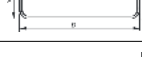
Rev.	AMENDMENT	DATE

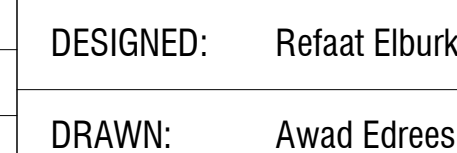
Court of Benghazi North
Benghazi
Roof Slab Beams Layout

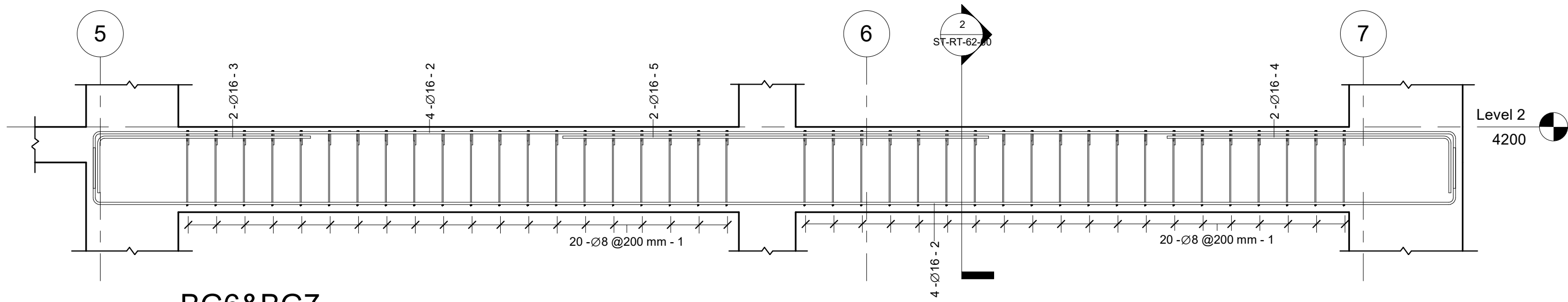
ST-RT-60-00

SCALE:	1 : 100	DATE:	February 2021
DESIGNED:	Refaat Elburki		
DRAWN:	Awad Edrees		

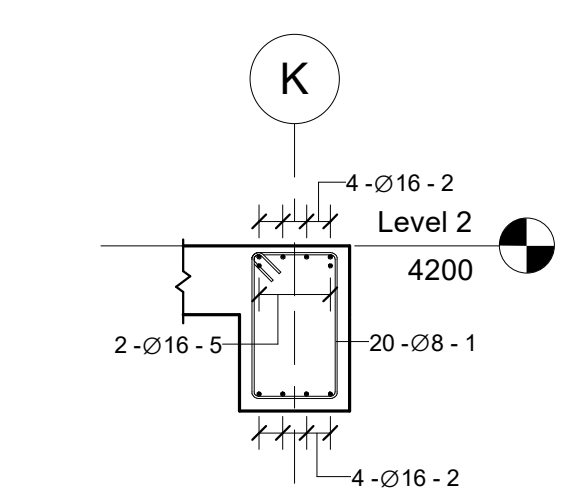


BG5,BF5,BS5&BTh5 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 8 Beams	Image
13	8 mm	30	1860 mm	56 m	310 mm	530 mm	110 mm	110 mm	22	176	
14	16 mm	8	7630 mm	61 m	400 mm	6900 mm	400 mm	0 mm	96	771	
15	16 mm	4	2570 mm	10 m	2200 mm	400 mm	0 mm	0 mm	16	130	
		42	127 m						135	1077	



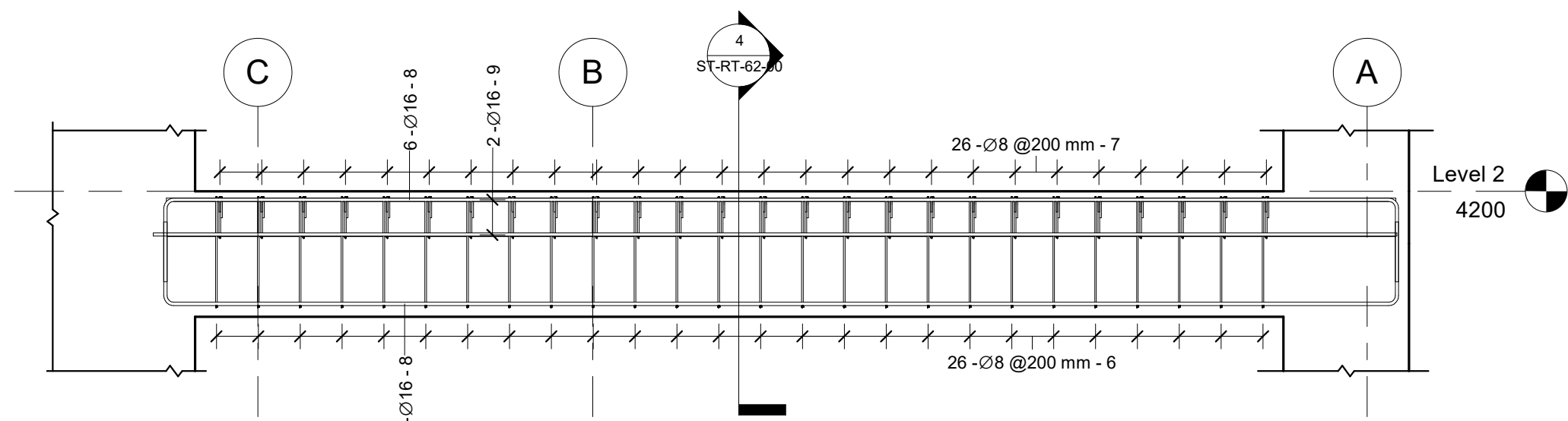


1 BG6&BG7
1 : 25

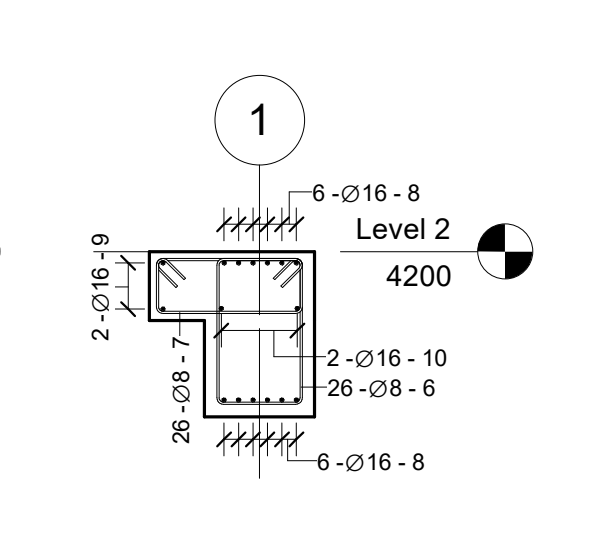


2 BG6&BG7 (Section)
1 : 25

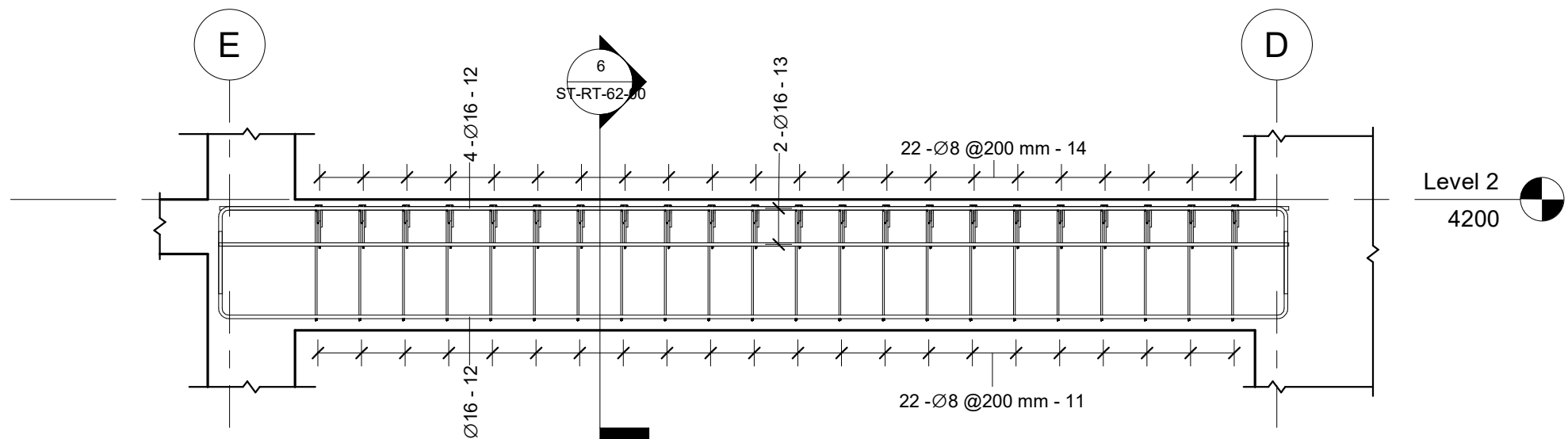
(BG6,7),(BF6,7),(BS6,7)&(BTh6,7) Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 8 Beams	Image
1	8 mm	40	1860 mm	74 m	310 mm	530 mm	110 mm	110 mm	29	235	
2	16 mm	8	10330 mm	83 m	400 mm	9600 mm	400 mm	0 mm	130	1043	
3	16 mm	2	1870 mm	4 m	1500 mm	400 mm	0 mm	0 mm	6	47	
4	16 mm	2	2370 mm	5 m	2000 mm	400 mm	0 mm	0 mm	7	60	
5	16 mm	2	3000 mm	6 m	3000 mm	0 mm	0 mm	0 mm	9	76	
		54		172 m					183	1461	



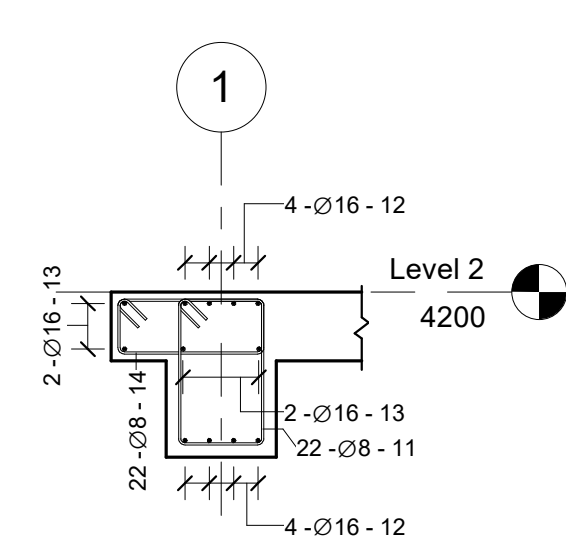
3 BG8
1 : 25



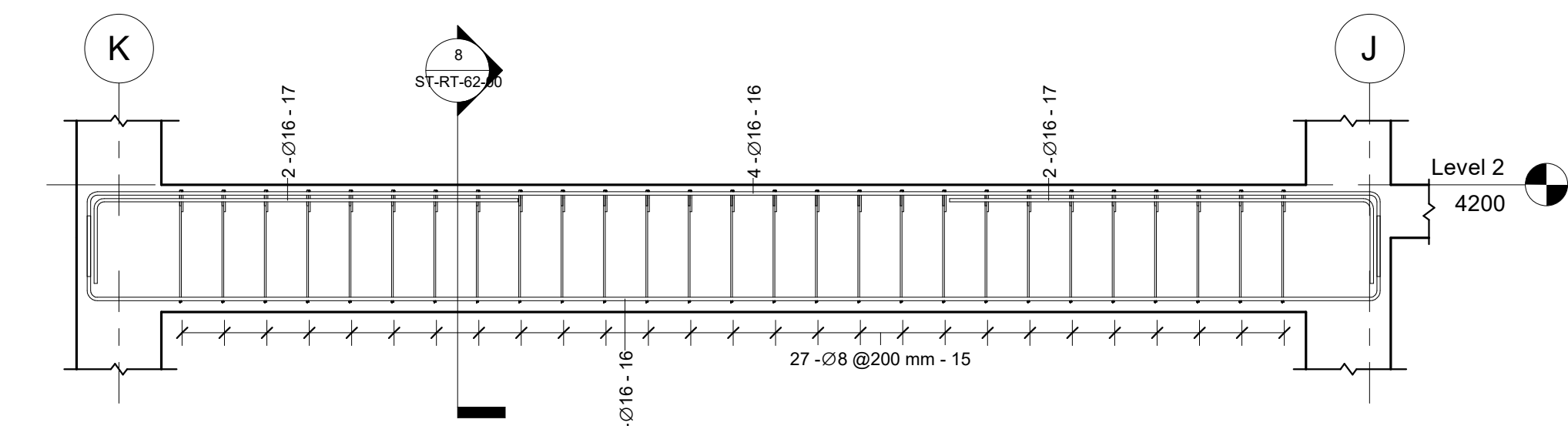
4 BG8 (Section)
1 : 25



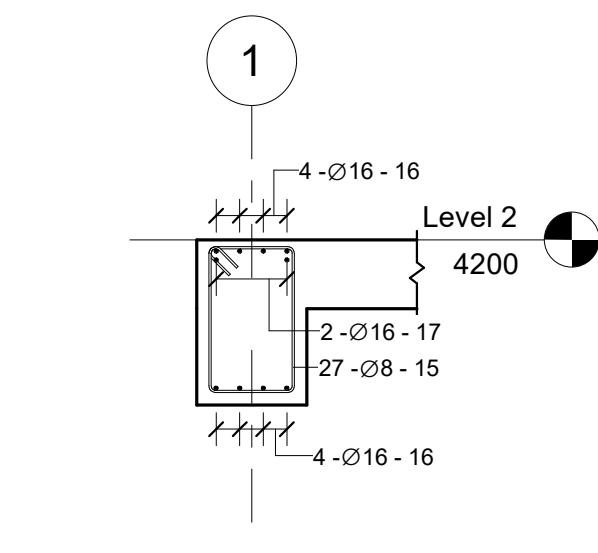
5 BG9
1 : 25



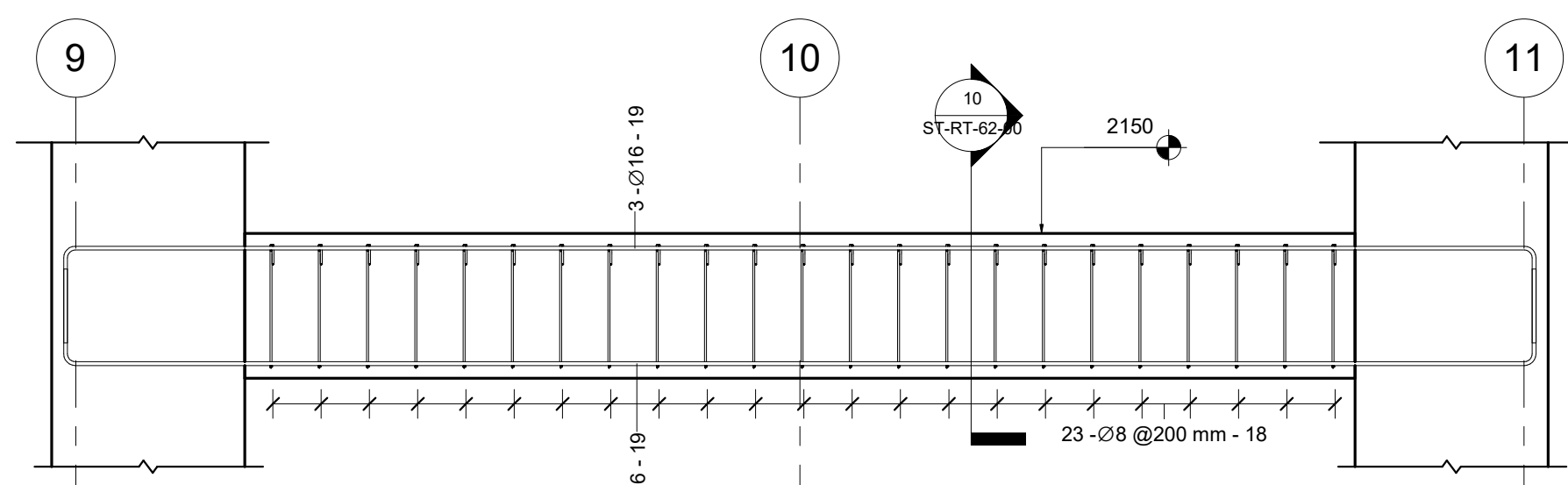
6 BG9 (Section)
1 : 25



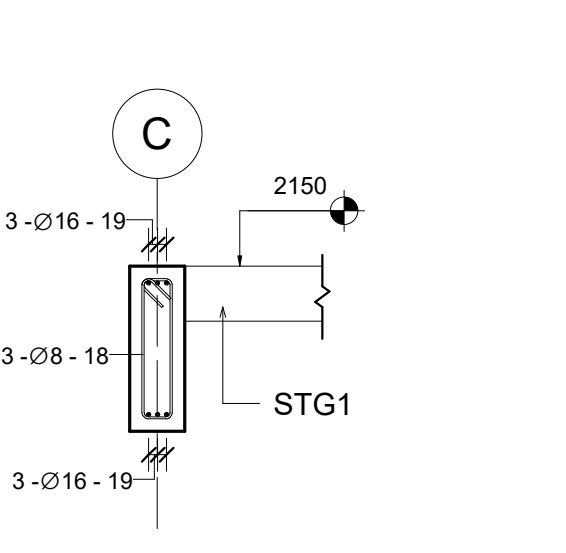
7 BG10
1 : 25



8 BG10 (Section)
1 : 25



9 BG11
1 : 25



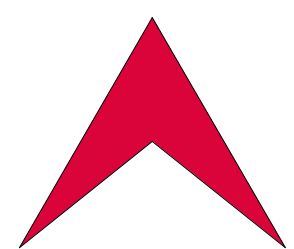
10 BG11 (Section)
1 : 25

BG8 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Beams	Image
6	8 mm	26	1860 mm	48 m	310 mm	530 mm	110 mm	110 mm	19	38	
7	8 mm	26	1640 mm	43 m	200 mm	530 mm	110 mm	110 mm	17	34	
8	16 mm	12	6630 mm	80 m	400 mm	5900 mm	400 mm	0 mm	126	251	
9	16 mm	2	5870 mm	12 m	5870 mm	0 mm	0 mm	0 mm	19	37	
10	16 mm	2	5940 mm	12 m	5940 mm	0 mm	0 mm	0 mm	19	38	
		68		194 m					199	398	

BG9 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Beams	Image
11	8 mm	22	1860 mm	41 m	310 mm	530 mm	110 mm	110 mm	16	32	
12	16 mm	8	5630 mm	45 m	400 mm	4900 mm	400 mm	0 mm	71	142	
13	16 mm	4	4900 mm	20 m	4900 mm	0 mm	0 mm	0 mm	31	62	
14	8 mm	22	1640 mm	36 m	200 mm	530 mm	110 mm	110 mm	14	28	
		56		142 m					132	265	

BG10,BF10,BS10&BTh10 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 8 Beams	Image
15	8 mm	27	1860 mm	50 m	310 mm	530 mm	110 mm	110 mm	20	159	
16	16 mm	8	6830 mm	55 m	400 mm	6100 mm	400 mm	0 mm	86	690	
17	16 mm	4	2370 mm	9 m	2000 mm	400 mm	0 mm	0 mm	15	120	
		39		114 m					121	968	

BG11,BF11&BS11 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 6 Beams	Image
18	8 mm	23	1420 mm	33 m	110 mm	510 mm	110 mm	110 mm	13	77	
19	16 mm	6	6830 mm	41 m	400 mm	6100 mm	400 mm	0 mm	65	388	
		29		74 m					78	465	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الغويهاة الغربية
شارع العامرية

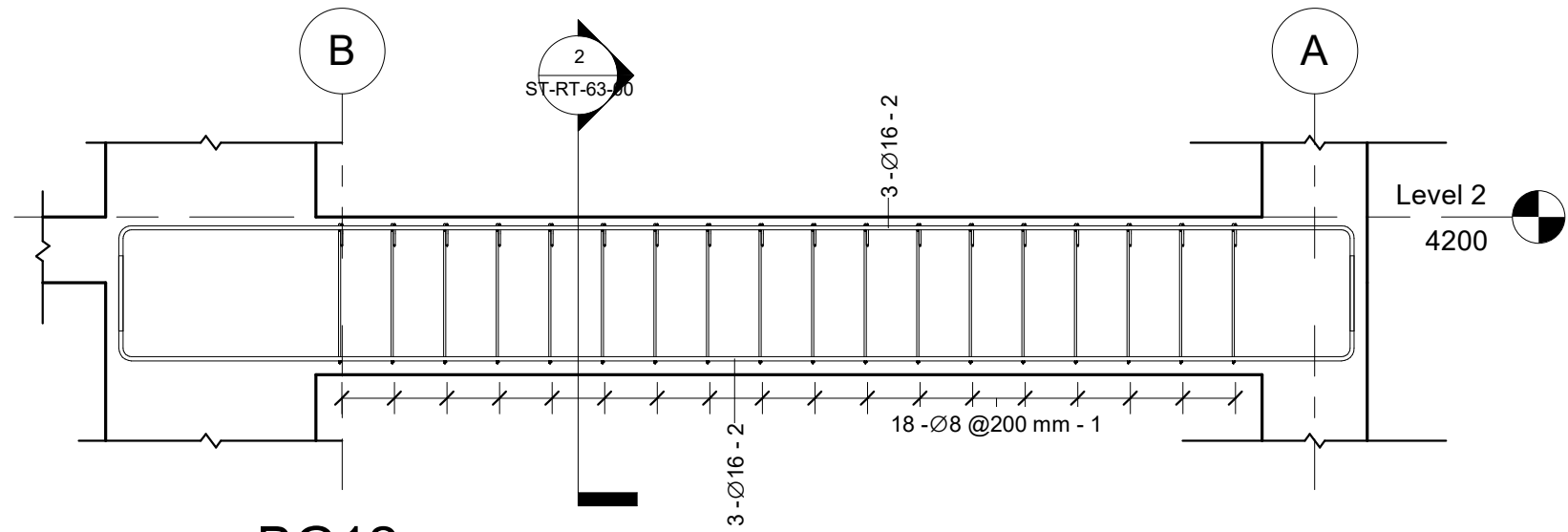
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Beams Reinforcement (2)

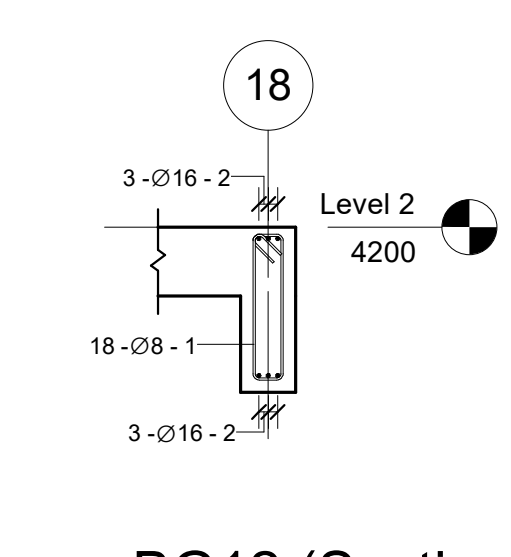
SCALE: 1 : 25
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

DATE: February 2021

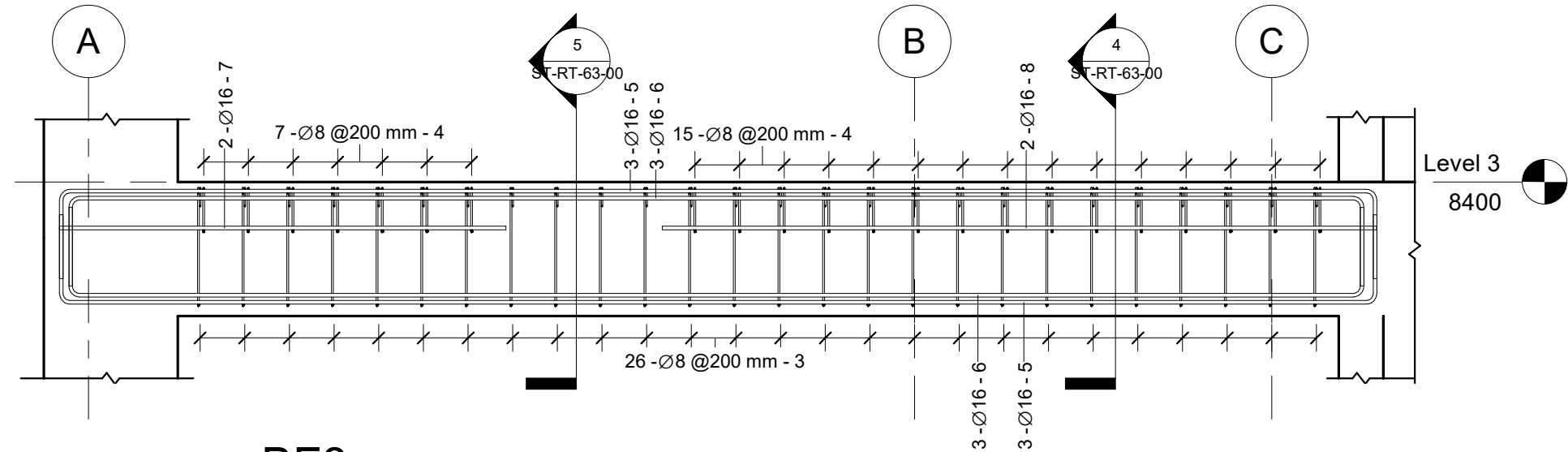
ST-RT-62-00



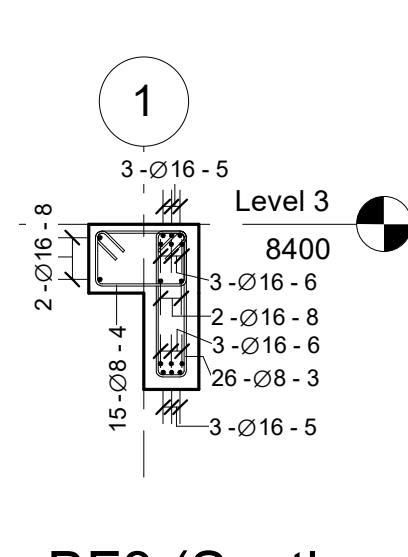
1 BG12
1 : 25



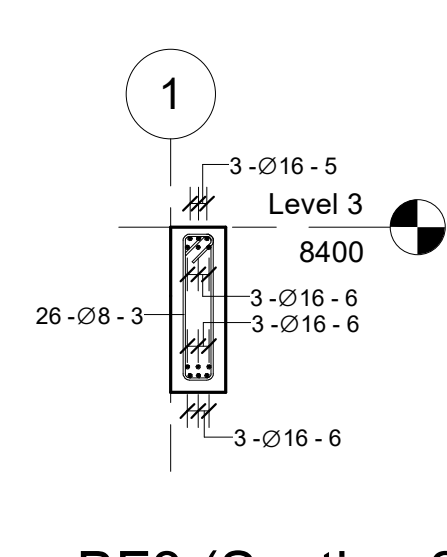
2 BG12 (Section)
1 : 25



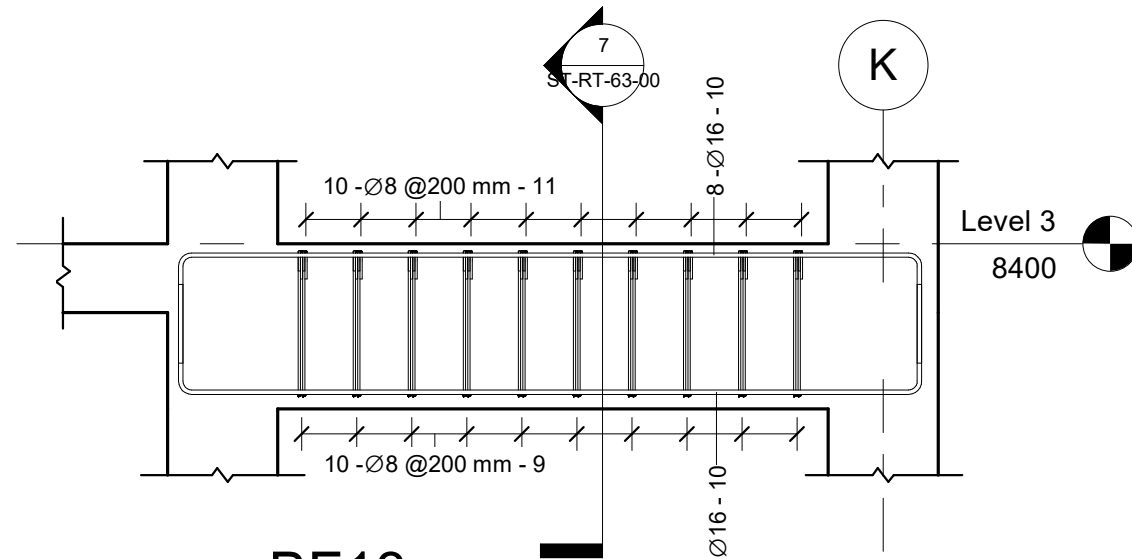
3 BF8
1 : 25



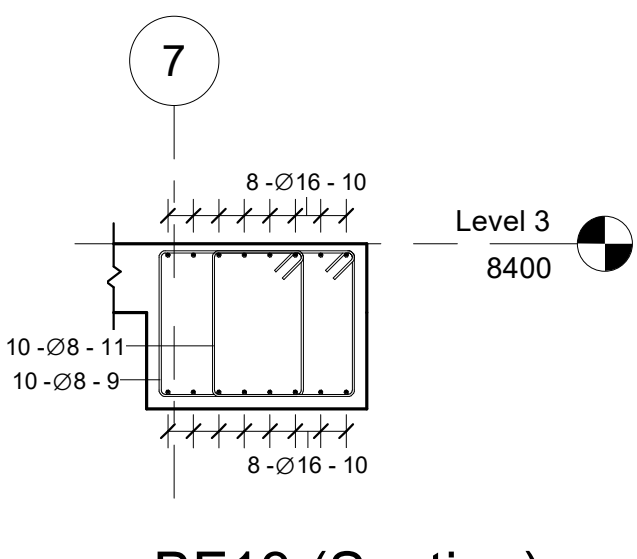
4 BF8 (Section 1)
1 : 25



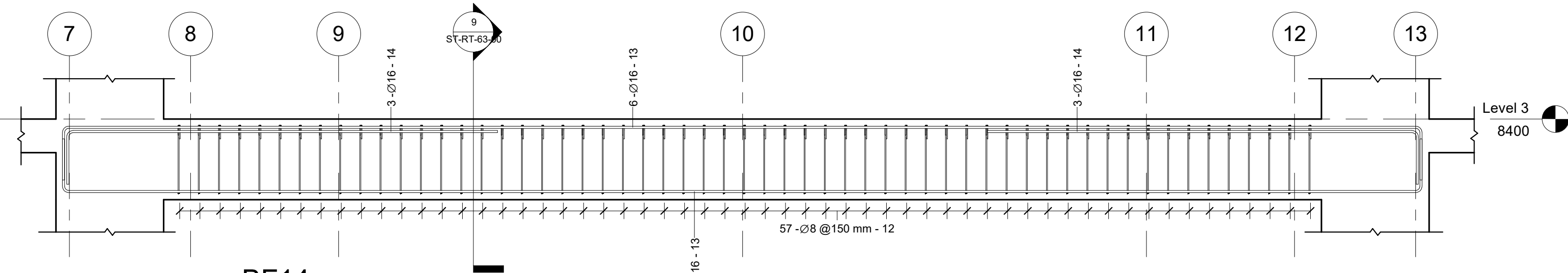
5 BF8 (Section 2)
1 : 25



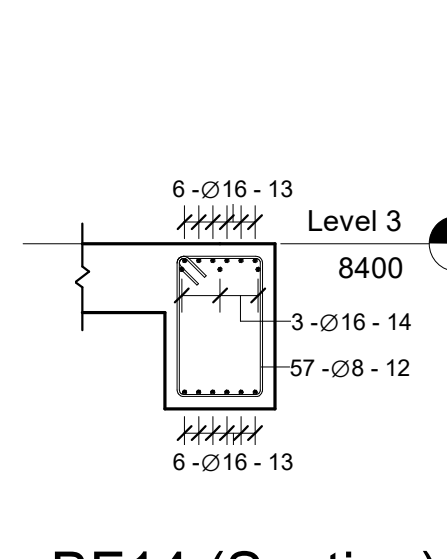
6 BF13
1 : 25



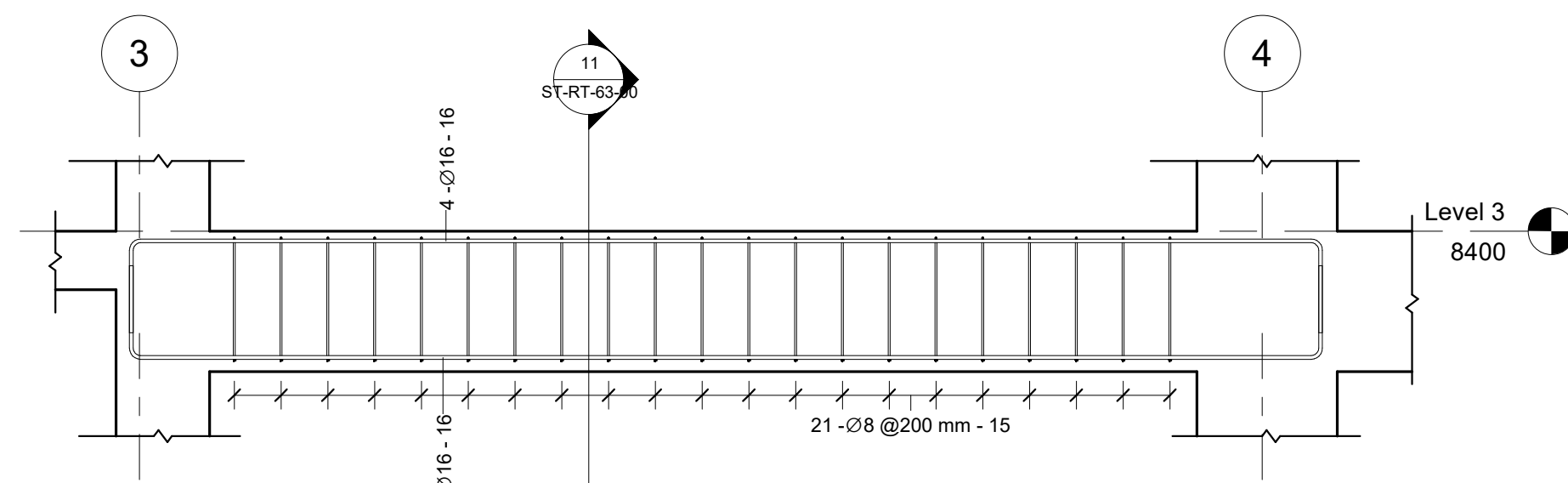
7 BF13 (Section)
1 : 25



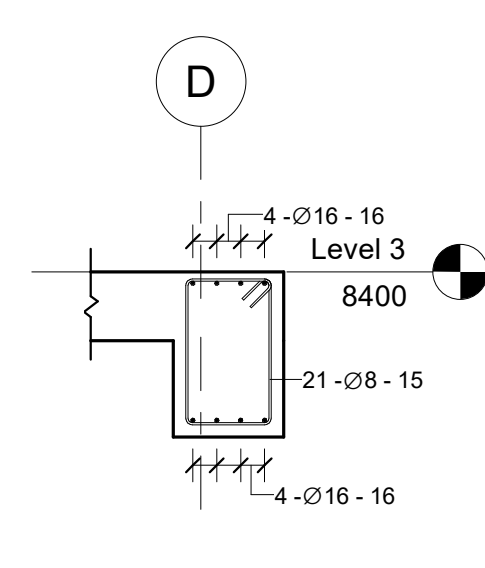
8 BF14
1 : 25



9 BF14 (Section)
1 : 25



10 BF15
1 : 25



11 BF15 (Section)
1 : 25

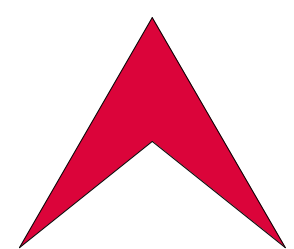
BF8,BS8&BTh8 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 6 Beams
3	8 mm	26	1460 mm	38 m	110 mm	530 mm	110 mm	110 mm	15	90
4	8 mm	22	1240 mm	27 m	330 mm	200 mm	110 mm	110 mm	11	65
5	16 mm	6	6630 mm	40 m	400 mm	5900 mm	400 mm	0 mm	63	377
6	16 mm	6	6530 mm	39 m	400 mm	5800 mm	400 mm	0 mm	62	371
7	16 mm	4	2000 mm	8 m	2000 mm	0 mm	0 mm	0 mm	13	76
8	16 mm	4	3200 mm	13 m	3200 mm	0 mm	0 mm	0 mm	20	121
		68			165 m			183	1099	

BG13&BF13 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 4 Beams
9	8 mm	10	2660 mm	27 m	710 mm	530 mm	110 mm	110 mm	10	42
10	16 mm	16	3430 mm	55 m	400 mm	2700 mm	400 mm	0 mm	87	346
11	8 mm	10	1900 mm	19 m	330 mm	530 mm	110 mm	110 mm	7	30
		36			100 m			105	418	

BG12,BF12,BS12&BTh12 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 8 Beams
1	8 mm	18	1460 mm	26 m	110 mm	530 mm	110 mm	110 mm	10	83
2	16 mm	6	5430 mm	33 m	400 mm	4700 mm	400 mm	0 mm	51	411
		24			59 m			62	494	

BG14&BF14 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Beams
12	8 mm	57	1820 mm	104 m	310 mm	510 mm	110 mm	110 mm	41	82
13	16 mm	12	10830 mm	130 m	400 mm	10100 mm	400 mm	0 mm	205	410
14	16 mm	6	3570 mm	21 m	3200 mm	400 mm	0 mm	0 mm	34	68
		75			255 m			280	560	

BF15,BS15&BTh15 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 6 Beams
15	8 mm	21	1860 mm	39 m	310 mm	530 mm	110 mm	110 mm	15	92
16	16 mm	8	5830 mm	47 m	400 mm	5100 mm	400 mm	0 mm	74	442
		29			86 m			89	534	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka البركة
Jamal Abdalnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



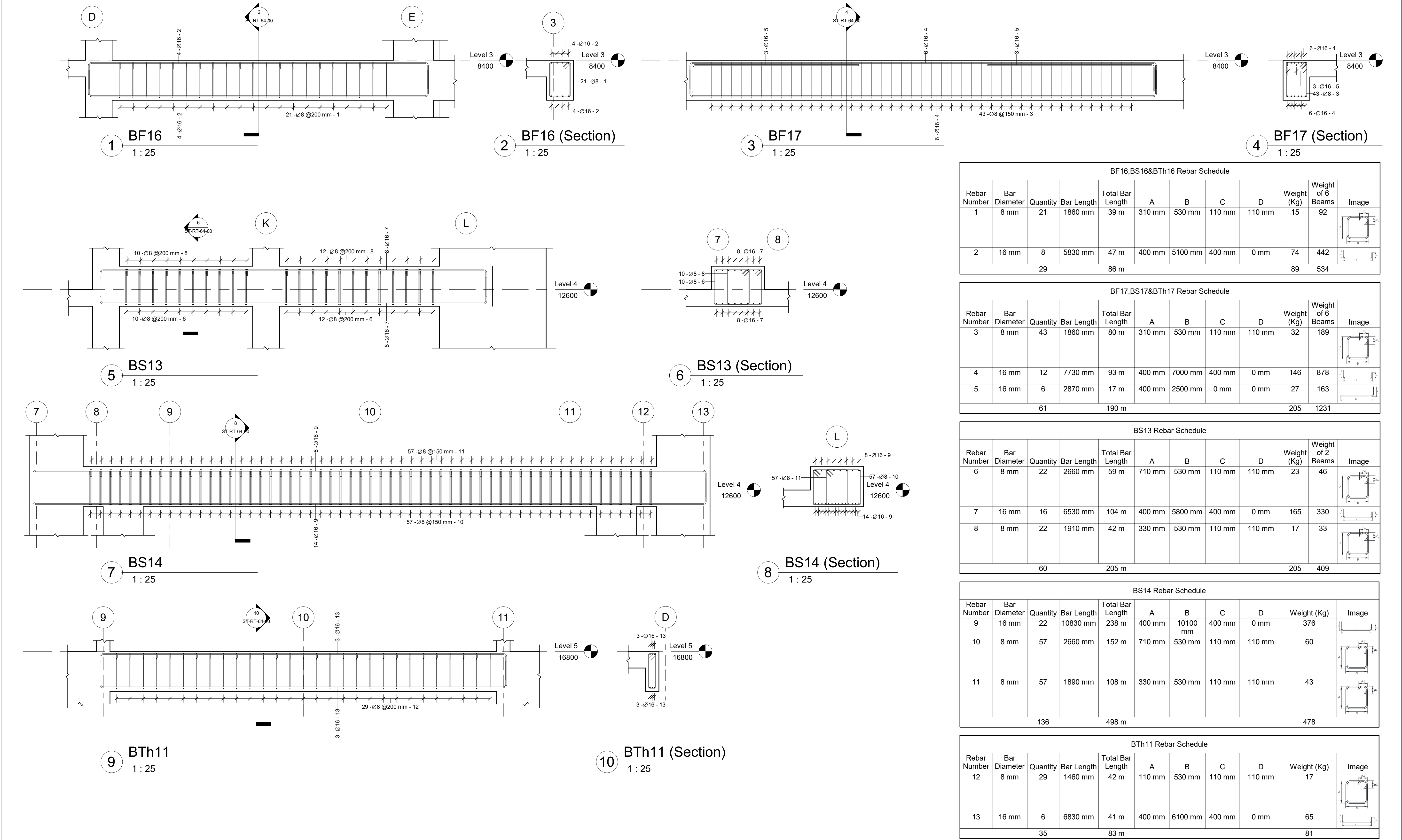
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Beams Reinforcement (3)

ST-RT-63-00

SCALE: 1 : 25	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



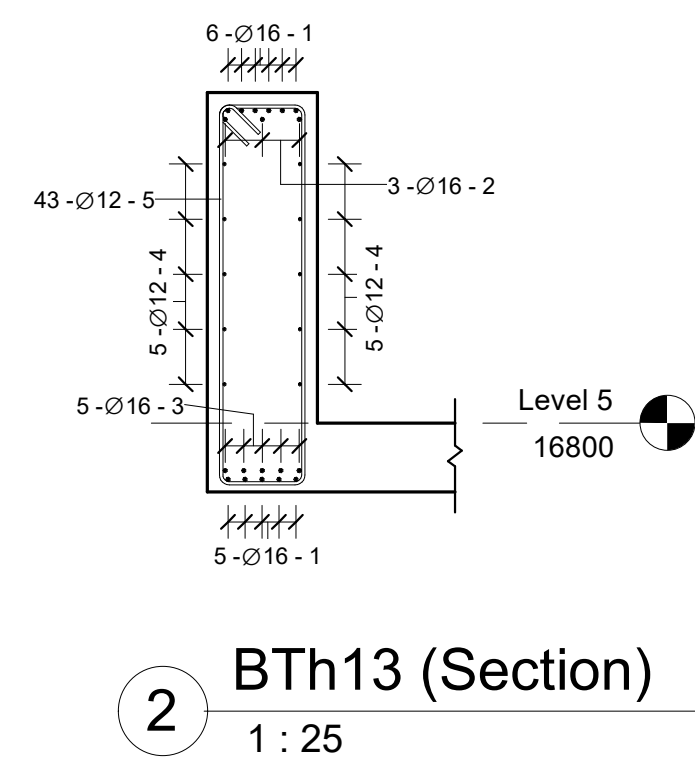
L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

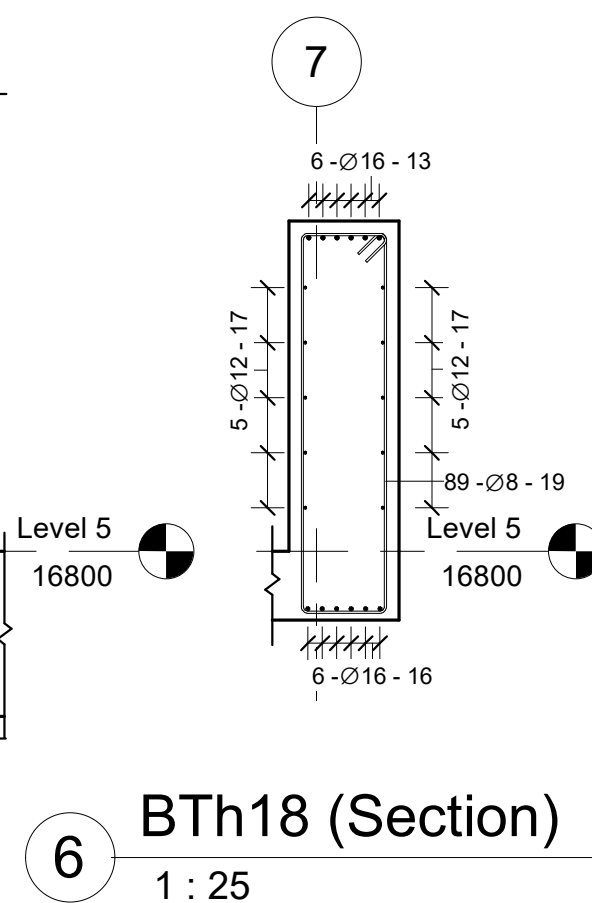
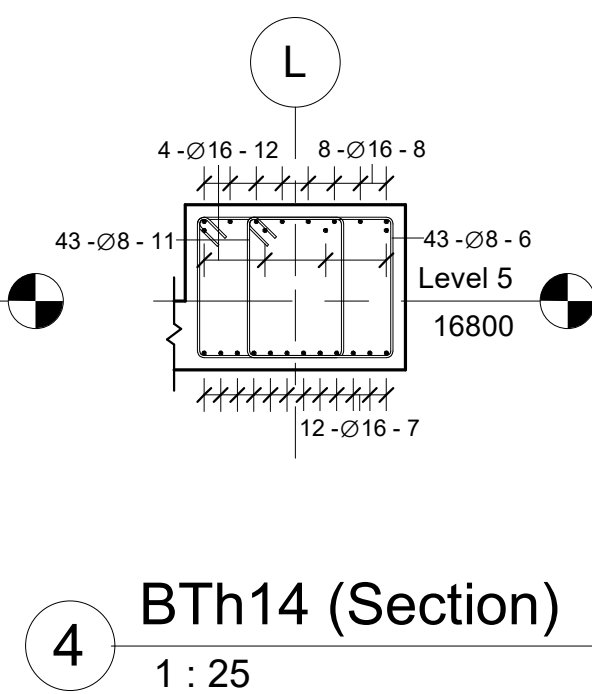
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

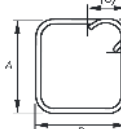
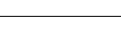
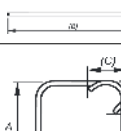
Rev.	AMENDMENT	DATE

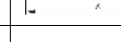
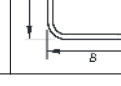
Court of Benghazi North Benghazi Beams Reinforcement (4)		ST-RT-64-00	
SCALE:	1 : 25	DATE:	February 2021
DESIGNED:	Refaat Elburki		
DRAWN:	Awad Edrees		

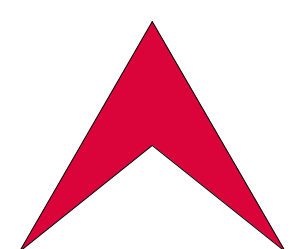


BTH13 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Image
1	16 mm	11	11930 mm	131 m	1000 mm	10000 mm	1000 mm	0 mm	207	
2	16 mm	6	4470 mm	27 m	1000 mm	3500 mm	0 mm	0 mm	42	
3	16 mm	5	11830 mm	59 m	1000 mm	9900 mm	1000 mm	0 mm	93	
4	12 mm	10	10000 mm	100 m	10000 mm	0 mm	0 mm	0 mm	89	
5	12 mm	43	3620 mm	156 m	310 mm	1380 mm	160 mm	160 mm	138	
		75	473 m						570	



BTh14 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Image
6	8 mm	63	2620 mm	165 m	710 mm	510 mm	110 mm	110 mm	65	
7	16 mm	12	10200 mm	122 m	10200 mm	0 mm	0 mm	0 mm	193	
8	16 mm	8	12000 mm	96 m	12000 mm	0 mm	0 mm	0 mm	152	
9	16 mm	24	5170 mm	124 m	400 mm	4800 mm	0 mm	0 mm	196	
10	16 mm	16	5370 mm	86 m	400 mm	5000 mm	0 mm	0 mm	136	
11	8 mm	63	1900 mm	120 m	350 mm	510 mm	110 mm	110 mm	47	
12	16 mm	8	7870 mm	63 m	400 mm	7500 mm	0 mm	0 mm	99	
194			776 m			888				

BTh18 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Beams	Image
13	16 mm	12	10960 mm	132 m	10000 mm	1000 mm	0 mm	0 mm	208	415	
14	16 mm	6	7360 mm	44 m	6400 mm	1000 mm	0 mm	0 mm	70	139	
15	16 mm	6	6460 mm	39 m	5500 mm	1000 mm	0 mm	0 mm	61	122	
16	16 mm	6	7500 mm	45 m	7500 mm	0 mm	0 mm	0 mm	71	142	
17	12 mm	10	12000 mm	120 m	12000 mm	0 mm	0 mm	0 mm	107	213	
18	12 mm	10	7400 mm	74 m	7400 mm	0 mm	0 mm	0 mm	66	131	
19	8 mm	89	3560 mm	317 m	310 mm	1380 mm	110 mm	110 mm	125	250	
		139	770 m						707	1413	



AL-baraka البركة
Jamal Abdunnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

[illegible]

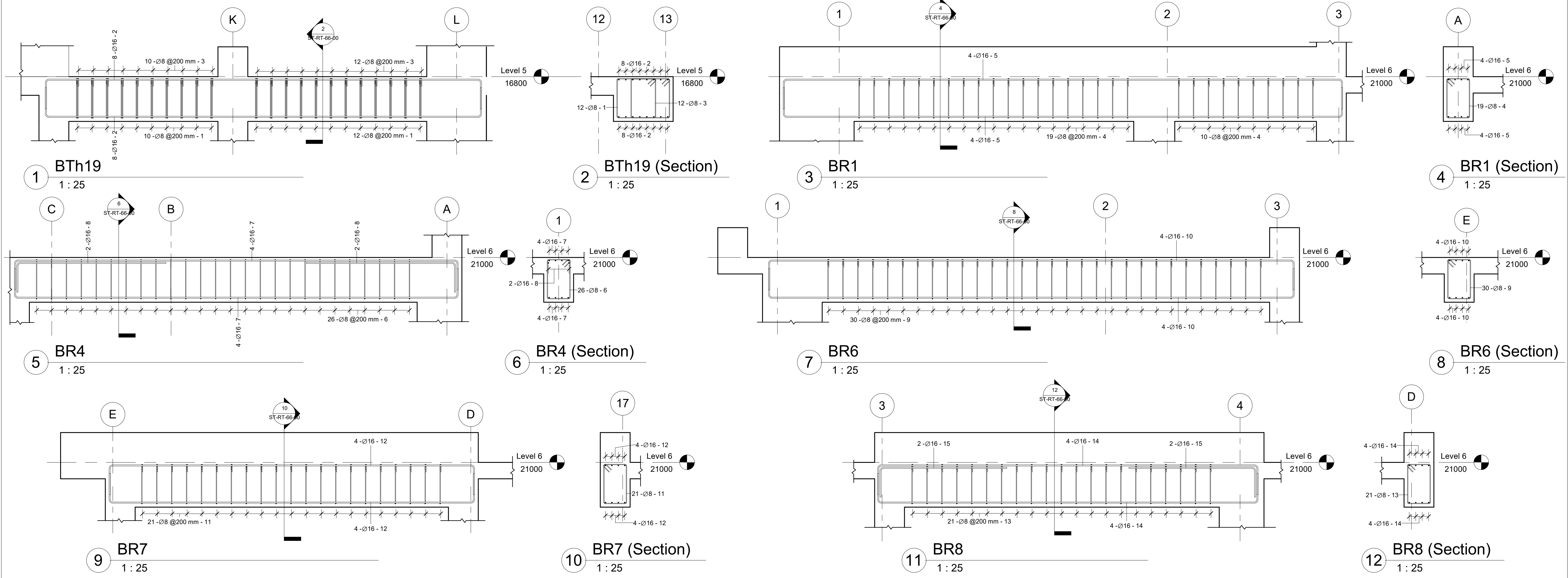
Court of Benghazi North
Benghazi
Beams Reinforcement (5)

SCALE: 1 : 25

DESIGNED:	Refaat Elburki
DRAWN:	Awad Edrees

ST-RT-65-00

DATE: February 2021



BTh19 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Beams	Image
1	8 mm	22	2660 mm	59 m	710 mm	530 mm	110 mm	110 mm	23	46	
2	16 mm	16	6580 mm	105 m	400 mm	5850 mm	400 mm	0 mm	166	332	
3	8 mm	22	1900 mm	42 m	330 mm	530 mm	110 mm	110 mm	16	33	
		60		206 m					206	412	

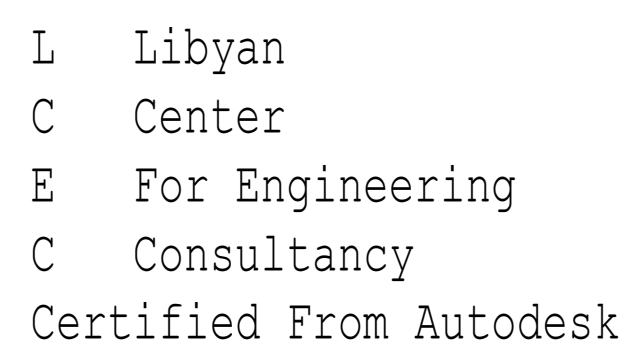
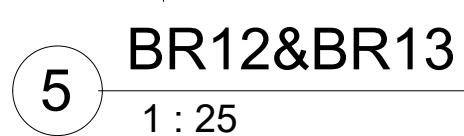
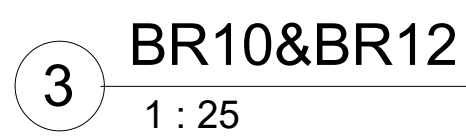
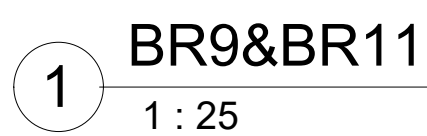
BR6 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Beams	Image
9	8 mm	30	1860 mm	56 m	310 mm	530 mm	110 mm	110 mm	22	44	
10	16 mm	8	7780 mm	62 m	400 mm	7050 mm	400 mm	0 mm	98	196	
		38		118 m					120	241	

BR1 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Beams	Image
4	8 mm	29	1860 mm	54 m	310 mm	530 mm	110 mm	110 mm	21	43	
5	16 mm	8	8230 mm	66 m	400 mm	7500 mm	400 mm	0 mm	104	208	
		37		120 m					125	250	

BR7 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Beams	Image
11	8 mm	21	1860 mm	39 m	310 mm	530 mm	110 mm	110 mm	15	31	
12	16 mm	8	5630 mm	45 m	400 mm	4900 mm	400 mm	0 mm	71	142	
		29		84 m					87	173	

BR4 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Beams	Image
6	8 mm	26	1860 mm	48 m	310 mm	530 mm	110 mm	110 mm	19	38	
7	16 mm	8	6680 mm	53 m	400 mm	5950 mm	400 mm	0 mm	84	169	
8	16 mm	4	2370 mm	9 m	2000 mm	400 mm	0 mm	0 mm	15	30	
		38		111 m					118	237	

BR8 Rebar Schedule											
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	D	Weight (Kg)	Weight of 2 Beams	Image
13	8 mm	21	1860 mm	39 m	310 mm	530 mm	110 mm	110 mm	15	31	
14	16 mm	8	5830 mm	47 m	400 mm	5100 mm	400 mm	0 mm	74	147	
15	16 mm	4	2070 mm	8 m	1700 mm	400 mm	0 mm	0 mm	13	26	
		33		94 m					102	204	

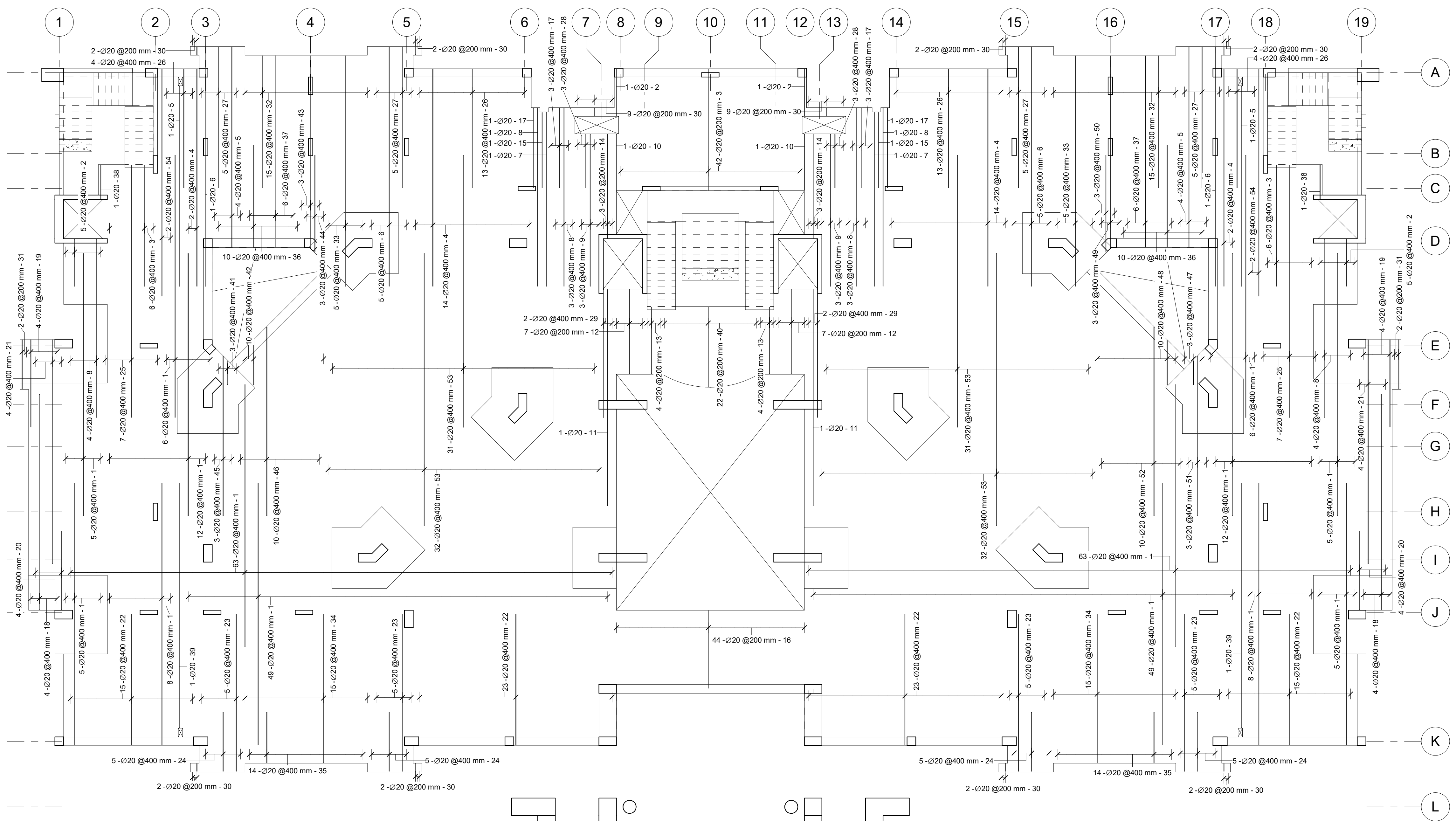


AL-baraka البركة
Jamal Abdunnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

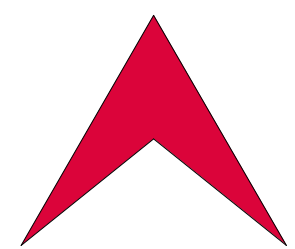


Rev.	AMENDMENT	DATE	Court of Benghazi North Benghazi Beams Reinforcement (7)	ST-RT-67-00
			SCALE: 1 : 25	DATE: February 2021
			DESIGNED: Refaat Elburki	
			DRAWN: Awad Edrees	

First Floor Slab Main Bottom Reinforcement (Major Direction) Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	296	12000 mm	3552 m	12000 mm	8760
2	20 mm	12	2150 mm	26 m	2150 mm	64
3	20 mm	54	5550 mm	300 m	5550 mm	739
4	20 mm	32	9950 mm	318 m	9950 mm	785
5	20 mm	10	9150 mm	92 m	9150 mm	226
6	20 mm	12	10950 mm	131 m	10950 mm	324
7	20 mm	2	7950 mm	16 m	7950 mm	39
8	20 mm	16	8150 mm	130 m	8150 mm	322
9	20 mm	6	6950 mm	42 m	6950 mm	103
10	20 mm	2	2550 mm	5 m	2550 mm	13
11	20 mm	2	9900 mm	20 m	9900 mm	49
12	20 mm	14	3850 mm	54 m	3850 mm	133
13	20 mm	8	3050 mm	24 m	3050 mm	60
14	20 mm	6	4750 mm	29 m	4750 mm	70
15	20 mm	2	3450 mm	7 m	3450 mm	17
16	20 mm	44	3550 mm	156 m	3550 mm	385
17	20 mm	8	3650 mm	29 m	3650 mm	72
18	20 mm	8	9850 mm	79 m	9850 mm	194
19	20 mm	8	4000 mm	32 m	4000 mm	79
20	20 mm	8	3600 mm	29 m	3600 mm	71
21	20 mm	8	10250 mm	82 m	10250 mm	202
22	20 mm	76	6000 mm	456 m	6000 mm	1125
23	20 mm	20	7200 mm	144 m	7200 mm	355
24	20 mm	20	2700 mm	54 m	2700 mm	133
25	20 mm	14	11550 mm	162 m	11550 mm	399
26	20 mm	34	5450 mm	185 m	5450 mm	457
27	20 mm	20	6450 mm	129 m	6450 mm	318
28	20 mm	6	2450 mm	15 m	2450 mm	36
29	20 mm	4	5850 mm	23 m	5850 mm	58
30	20 mm	34	350 mm	12 m	350 mm	29
31	20 mm	4	2250 mm	9 m	2250 mm	22
32	20 mm	30	6050 mm	182 m	6050 mm	448
33	20 mm	10	10550 mm	106 m	10550 mm	260
34	20 mm	30	6800 mm	204 m	6800 mm	503
35	20 mm	28	2300 mm	64 m	2300 mm	159
36	20 mm	20	4650 mm	93 m	4650 mm	229
37	20 mm	12	8750 mm	105 m	8750 mm	259
38	20 mm	2	1550 mm	3 m	1550 mm	8
39	20 mm	2	11200 mm	22 m	11200 mm	55
40	20 mm	22	Variable	76 m	Variable	187
41	20 mm	3	Variable	3 m	Variable	8
42	20 mm	10	Variable	34 m	Variable	84
43	20 mm	3	Variable	26 m	Variable	65
44	20 mm	3	Variable	13 m	Variable	33
45	20 mm	3	Variable	22 m	Variable	54
46	20 mm	10	Variable	92 m	Variable	227
47	20 mm	3	Variable	3 m	Variable	8
48	20 mm	10	Variable	34 m	Variable	84
49	20 mm	3	Variable	26 m	Variable	65
50	20 mm	3	Variable	13 m	Variable	33
51	20 mm	3	Variable	22 m	Variable	54
52	20 mm	10	Variable	92 m	Variable	227
53	20 mm	126	12450 mm	1569 m	12450 mm	3869
54	20 mm	4	10400 mm	42 m	10400 mm	103
		1140	9189 m	22661		



1 First Floor Slab Main Bottom Reinforcement (Major Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

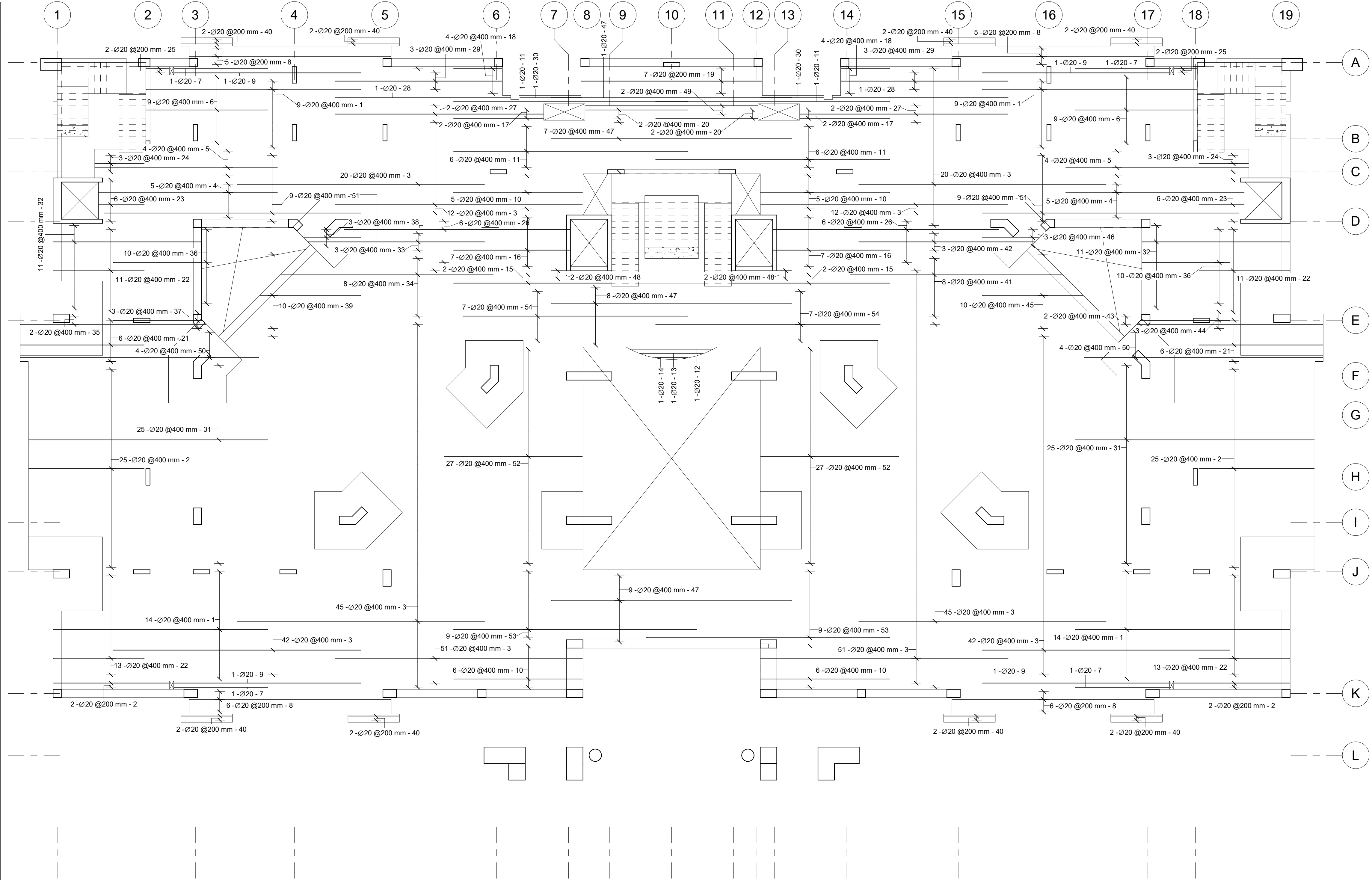
البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



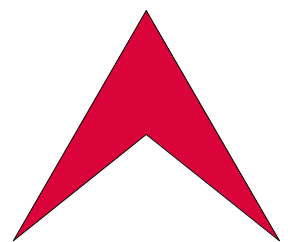
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE	Court of Benghazi North Benghazi First Floor Slab Main Bottom Reinforcement (Major Direction)		ST-RT-68-00
			SCALE:	1 : 100	DATE: February 2021
			DESIGNED:	Refaat Elburki	
			DRAWN:	Awad Edrees	

First Floor Slab Main Bottom Reinforcement (Minor Direction) Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	46	10400 mm	478 m	10400 mm	1180
2	20 mm	54	5600 mm	302 m	5600 mm	746
3	20 mm	340	12000 mm	4080 m	12000 mm	10062
4	20 mm	10	8650 mm	87 m	8650 mm	213
5	20 mm	8	8850 mm	71 m	8850 mm	175
6	20 mm	18	5900 mm	106 m	5900 mm	262
7	20 mm	4	4550 mm	18 m	4550 mm	45
8	20 mm	22	9750 mm	215 m	9750 mm	529
9	20 mm	4	9050 mm	36 m	9050 mm	89
10	20 mm	22	6250 mm	138 m	6250 mm	339
11	20 mm	14	11350 mm	159 m	11350 mm	392
12	20 mm	1	3930 mm	4 m	3930 mm	10
13	20 mm	1	3030 mm	3 m	3030 mm	7
14	20 mm	1	1600 mm	2 m	1600 mm	4
15	20 mm	4	8750 mm	31 m	8750 mm	75
16	20 mm	14	5650 mm	79 m	5650 mm	195
17	20 mm	4	4350 mm	17 m	4350 mm	43
18	20 mm	8	2350 mm	19 m	2350 mm	46
19	20 mm	7	8750 mm	61 m	8750 mm	151
20	20 mm	4	4950 mm	20 m	4950 mm	49
21	20 mm	12	6000 mm	72 m	6000 mm	178
22	20 mm	48	4400 mm	211 m	4400 mm	521
23	20 mm	12	2200 mm	26 m	2200 mm	65
24	20 mm	6	2400 mm	14 m	2400 mm	36
25	20 mm	4	1100 mm	4 m	1100 mm	11
26	20 mm	12	10950 mm	131 m	10950 mm	324
27	20 mm	4	10100 mm	40 m	10100 mm	100
28	20 mm	2	8500 mm	17 m	8500 mm	42
29	20 mm	6	8100 mm	49 m	8100 mm	120
30	20 mm	2	3000 mm	6 m	3000 mm	15
31	20 mm	50	11600 mm	580 m	11600 mm	1430
32	20 mm	22	7150 mm	157 m	7150 mm	388
33	20 mm	3	Variable	26 m	Variable	63
34	20 mm	8	Variable	87 m	Variable	215
35	20 mm	2	Variable	18 m	Variable	43
36	20 mm	20	4250 mm	85 m	4250 mm	210
37	20 mm	3	Variable	13 m	Variable	32
38	20 mm	3	Variable	8 m	Variable	20
39	20 mm	10	Variable	47 m	Variable	115
40	20 mm	16	2450 mm	39 m	2450 mm	97
41	20 mm	8	Variable	87 m	Variable	215
42	20 mm	3	Variable	26 m	Variable	63
43	20 mm	2	Variable	18 m	Variable	43
44	20 mm	3	Variable	13 m	Variable	32
45	20 mm	10	Variable	47 m	Variable	115
46	20 mm	3	Variable	8 m	Variable	20
47	20 mm	25	11650 mm	291 m	11650 mm	718
48	20 mm	4	2900 mm	12 m	2900 mm	29
49	20 mm	2	8350 mm	17 m	8350 mm	41
50	20 mm	8	11550 mm	92 m	11550 mm	228
51	20 mm	18	12450 mm	224 m	12450 mm	553
52	20 mm	54	6700 mm	362 m	6700 mm	892
53	20 mm	18	11800 mm	212 m	11800 mm	524
54	20 mm	14	10900 mm	153 m	10900 mm	376
1003			9118 m			22485



1 First Floor Slab Main Bottom Reinforcement (Minor Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



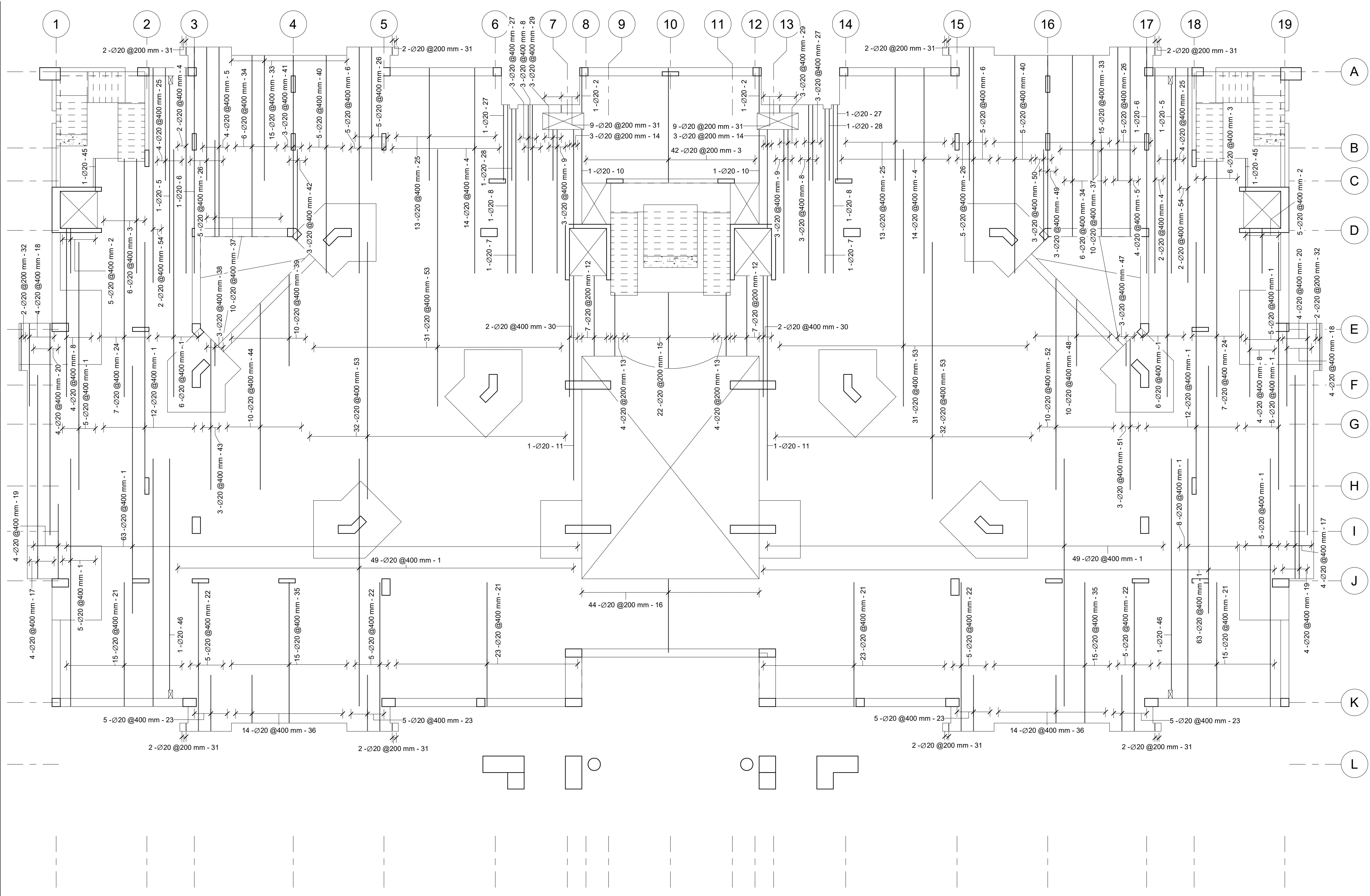
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

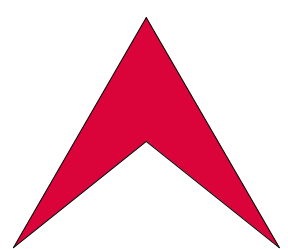
Court of Benghazi North
Benghazi
First Floor Slab Main Bottom Reinforcement (Minor Direction)
SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

ST-RT-69-00
DATE: February 2021

First Floor Slab Main Top Reinforcement (Major Direction) Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	296	12000 mm	3552 m	12000 mm	8760
2	20 mm	12	2150 mm	26 m	2150 mm	64
3	20 mm	54	5550 mm	300 m	5550 mm	739
4	20 mm	32	9950 mm	318 m	9950 mm	785
5	20 mm	10	9150 mm	92 m	9150 mm	226
6	20 mm	12	10950 mm	131 m	10950 mm	324
7	20 mm	2	7950 mm	16 m	7950 mm	39
8	20 mm	16	8150 mm	130 m	8150 mm	322
9	20 mm	6	6950 mm	42 m	6950 mm	103
10	20 mm	2	2550 mm	5 m	2550 mm	13
11	20 mm	2	9900 mm	20 m	9900 mm	49
12	20 mm	14	3850 mm	54 m	3850 mm	133
13	20 mm	8	3050 mm	24 m	3050 mm	60
14	20 mm	6	4750 mm	29 m	4750 mm	70
15	20 mm	22	Variable	76 m	Variable	187
16	20 mm	44	3550 mm	156 m	3550 mm	385
17	20 mm	8	9850 mm	79 m	9850 mm	194
18	20 mm	8	4000 mm	32 m	4000 mm	79
19	20 mm	8	3600 mm	29 m	3600 mm	71
20	20 mm	8	10250 mm	82 m	10250 mm	202
21	20 mm	76	6000 mm	456 m	6000 mm	1125
22	20 mm	20	7200 mm	144 m	7200 mm	355
23	20 mm	20	2700 mm	54 m	2700 mm	133
24	20 mm	14	11550 mm	162 m	11550 mm	399
25	20 mm	34	5450 mm	185 m	5450 mm	457
26	20 mm	20	6450 mm	129 m	6450 mm	318
27	20 mm	8	3650 mm	29 m	3650 mm	72
28	20 mm	2	3450 mm	7 m	3450 mm	17
29	20 mm	6	2450 mm	15 m	2450 mm	36
30	20 mm	4	5850 mm	23 m	5850 mm	58
31	20 mm	34	350 mm	12 m	350 mm	29
32	20 mm	4	2250 mm	9 m	2250 mm	22
33	20 mm	30	6050 mm	182 m	6050 mm	448
34	20 mm	12	8750 mm	105 m	8750 mm	259
35	20 mm	30	6800 mm	204 m	6800 mm	503
36	20 mm	28	2300 mm	64 m	2300 mm	159
37	20 mm	20	4650 mm	93 m	4650 mm	229
38	20 mm	3	Variable	3 m	Variable	8
39	20 mm	10	Variable	34 m	Variable	84
40	20 mm	10	10550 mm	106 m	10550 mm	260
41	20 mm	3	Variable	26 m	Variable	65
42	20 mm	3	Variable	13 m	Variable	33
43	20 mm	3	Variable	22 m	Variable	54
44	20 mm	10	Variable	92 m	Variable	227
45	20 mm	2	1550 mm	3 m	1550 mm	8
46	20 mm	2	11200 mm	22 m	11200 mm	55
47	20 mm	3	Variable	3 m	Variable	8
48	20 mm	10	Variable	34 m	Variable	84
49	20 mm	3	Variable	26 m	Variable	65
50	20 mm	3	Variable	13 m	Variable	33
51	20 mm	3	Variable	22 m	Variable	54
52	20 mm	10	Variable	92 m	Variable	227
53	20 mm	126	12450 mm	1569 m	12450 mm	3869
54	20 mm	4	10400 mm	42 m	10400 mm	103
		1140		9189 m		22661



1 First Floor Slab Main Top Reinforcement (Major Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهات الغربية
شارع العامرية

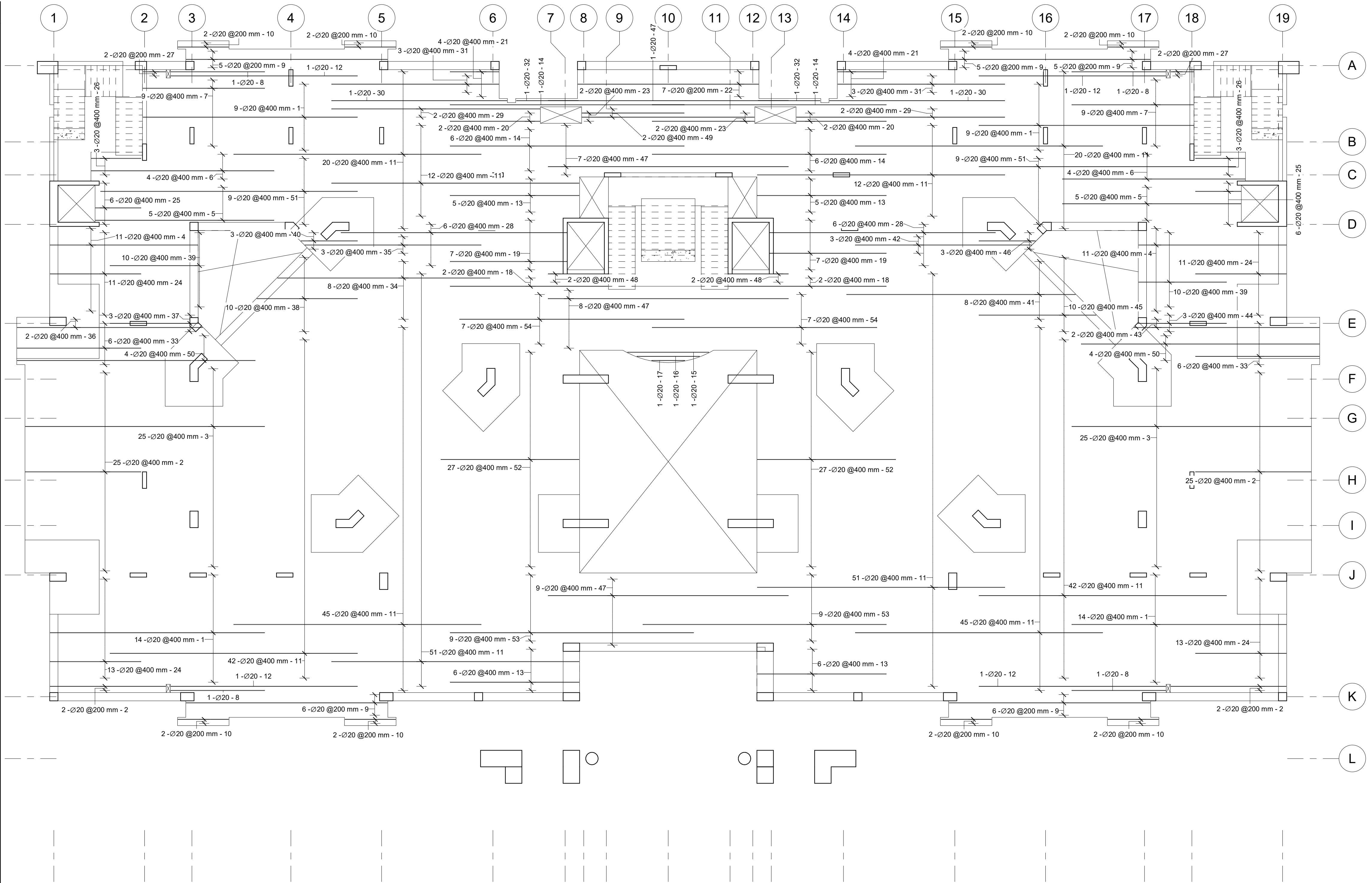
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
First Floor Slab Main Top Reinforcement (Major Direction)
SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

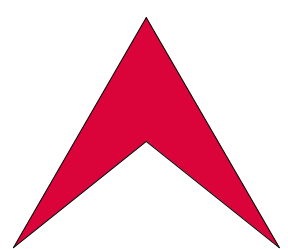
ST-RT-70-00

DATE: February 2021

First Floor Slab Main Top Reinforcement (Minor Direction) Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	46	10400 mm	478 m	10400 mm	1180
2	20 mm	54	5600 mm	302 m	5600 mm	746
3	20 mm	50	11600 mm	580 m	11600 mm	1430
4	20 mm	22	7150 mm	157 m	7150 mm	388
5	20 mm	10	8650 mm	87 m	8650 mm	213
6	20 mm	8	8850 mm	71 m	8850 mm	175
7	20 mm	18	5900 mm	106 m	5900 mm	262
8	20 mm	4	4550 mm	18 m	4550 mm	45
9	20 mm	22	9750 mm	215 m	9750 mm	529
10	20 mm	16	2450 mm	39 m	2450 mm	97
11	20 mm	340	12000 mm	4080 m	12000 mm	10062
12	20 mm	4	9050 mm	36 m	9050 mm	89
13	20 mm	22	6250 mm	138 m	6250 mm	339
14	20 mm	14	11350 mm	159 m	11350 mm	392
15	20 mm	1	3930 mm	4 m	3930 mm	10
16	20 mm	1	3030 mm	3 m	3030 mm	7
17	20 mm	1	1600 mm	2 m	1600 mm	4
18	20 mm	4	7650 mm	31 m	7650 mm	75
19	20 mm	14	5650 mm	79 m	5650 mm	195
20	20 mm	4	4350 mm	17 m	4350 mm	43
21	20 mm	8	2350 mm	19 m	2350 mm	46
22	20 mm	7	8750 mm	61 m	8750 mm	151
23	20 mm	4	4950 mm	20 m	4950 mm	49
24	20 mm	48	4400 mm	211 m	4400 mm	521
25	20 mm	12	2200 mm	26 m	2200 mm	65
26	20 mm	6	2400 mm	14 m	2400 mm	36
27	20 mm	4	1100 mm	4 m	1100 mm	11
28	20 mm	12	10950 mm	131 m	10950 mm	324
29	20 mm	4	10100 mm	40 m	10100 mm	100
30	20 mm	2	8500 mm	17 m	8500 mm	42
31	20 mm	6	8100 mm	49 m	8100 mm	120
32	20 mm	2	3000 mm	6 m	3000 mm	15
33	20 mm	12	6000 mm	72 m	6000 mm	178
34	20 mm	8	Variable	87 m	Variable	215
35	20 mm	3	Variable	26 m	Variable	63
36	20 mm	2	Variable	18 m	Variable	43
37	20 mm	3	Variable	13 m	Variable	32
38	20 mm	10	Variable	47 m	Variable	115
39	20 mm	20	4250 mm	85 m	4250 mm	210
40	20 mm	3	Variable	8 m	Variable	20
41	20 mm	8	Variable	87 m	Variable	215
42	20 mm	3	Variable	26 m	Variable	63
43	20 mm	2	Variable	18 m	Variable	43
44	20 mm	3	Variable	13 m	Variable	32
45	20 mm	10	Variable	47 m	Variable	115
46	20 mm	3	Variable	8 m	Variable	20
47	20 mm	25	11650 mm	291 m	11650 mm	718
48	20 mm	4	2900 mm	12 m	2900 mm	29
49	20 mm	2	8350 mm	17 m	8350 mm	41
50	20 mm	8	11550 mm	92 m	11550 mm	228
51	20 mm	18	12450 mm	224 m	12450 mm	553
52	20 mm	54	6700 mm	362 m	6700 mm	892
53	20 mm	18	11800 mm	212 m	11800 mm	524
54	20 mm	14	10900 mm	153 m	10900 mm	376
1003		9118 m		22485		



1 First Floor Slab Main Top Reinforcement (Minor Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

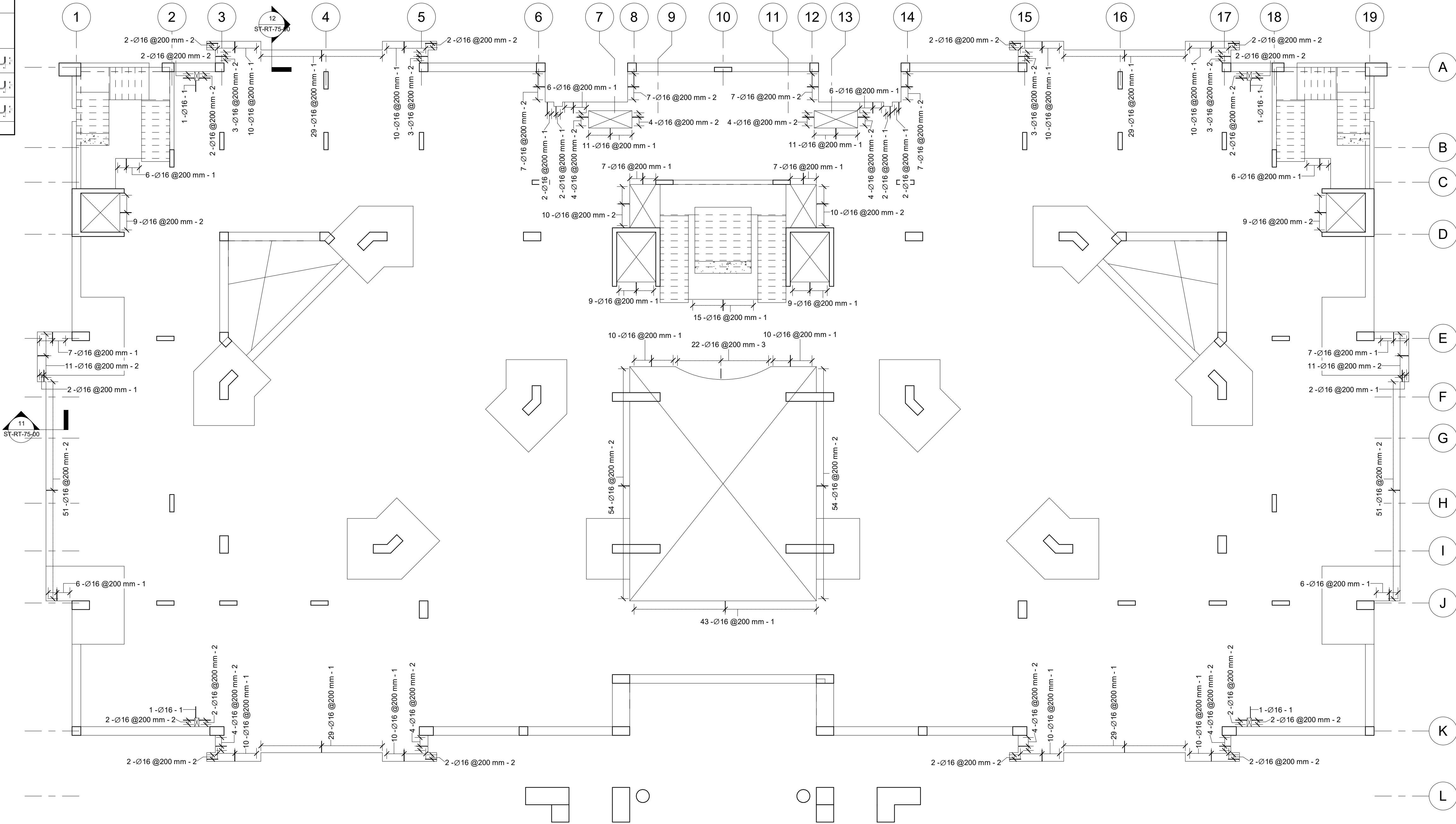
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
First Floor Slab Main Top Reinforcement (Minor Direction)
SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

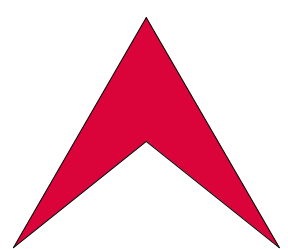
DATE: February 2021

ST-RT-71-00

First Floor Slab Side Rebar Schedule								
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)
1	16 mm	394	1130 mm	445 m	500 mm	200 mm	500 mm	703
2	16 mm	374	1090 mm	408 m	500 mm	160 mm	500 mm	643
3	16 mm	22	1130 mm	23 m	500 mm	200 mm	500 mm	36
		790		876 m				1382



1 First Floor Slab Side Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية



Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
First Floor Slab Side Reinforcement

ST-RT-72-00

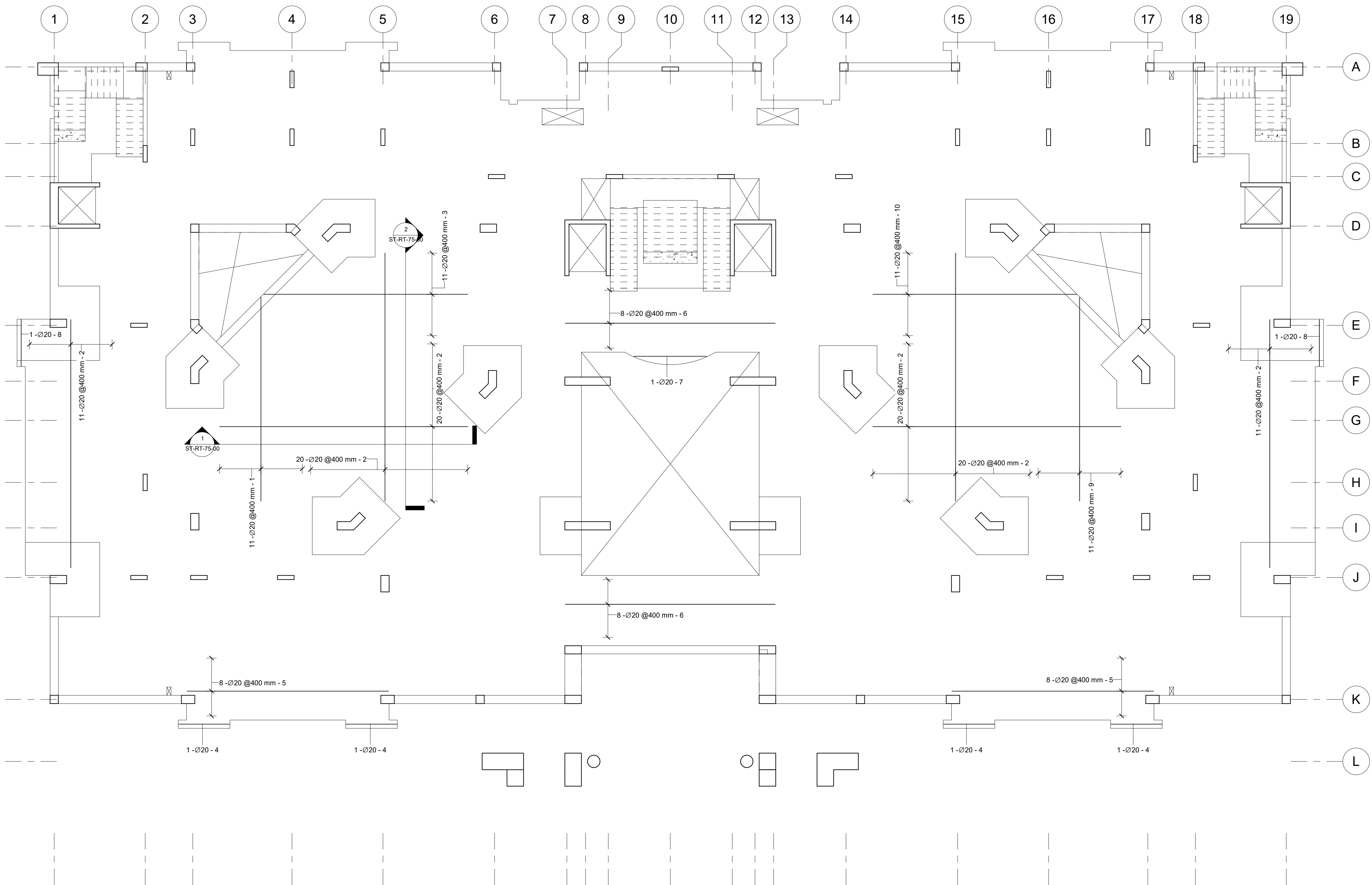
SCALE: 1 : 100

DATE: February 2021

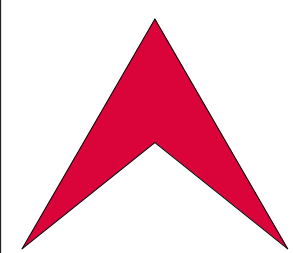
DESIGNED: Refaat Elburki

DRAWN: Awad Edrees

First Floor Slab Additional Bottom Reinforcement Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	11	108 m	1224 m	12000 mm	3019	
2	20 mm	102	Variable	108 m	Variable	267	
3	20 mm	11	Variable	108 m	Variable	267	
4	20 mm	4	2450 mm	10 m	2450 mm	24	
5	20 mm	16	9750 mm	156 m	9750 mm	385	
6	20 mm	16	10150 mm	162 m	10150 mm	401	
7	20 mm	1	3520 mm	4 m	3520 mm	9	
8	20 mm	2	2250 mm	5 m	2250 mm	11	
9	20 mm	11	Variable	108 m	Variable	267	
10	20 mm	11	Variable	108 m	Variable	267	
		185		1994 m		4916	



1 First Floor Slab Additional Bottom Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

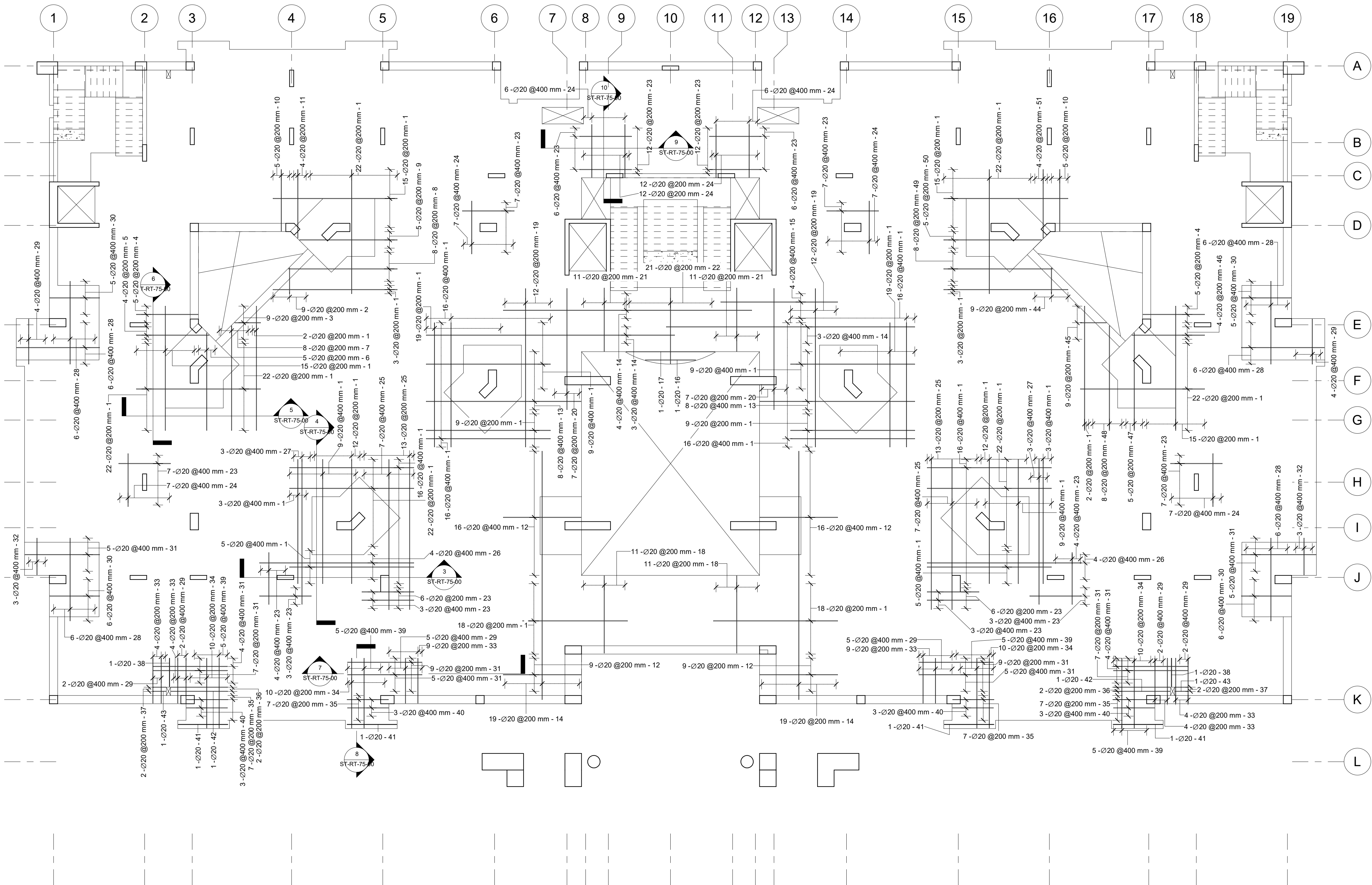
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
First Floor Slab Additional Bottom Reinforcement

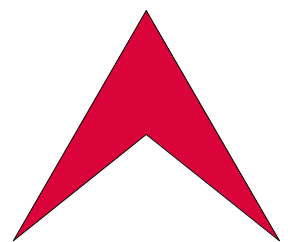
ST-RT-73-00

SCALE:	1 : 100	DATE:	February 2021
DESIGNED:	Refaat Elburki		
DRAWN:	Awad Edrees		

First Floor Slab Additional Top Reinforcement Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	466	6000 mm	2796 m	6000 mm	6895
2	20 mm	9	Variable	11 m	Variable	28
3	20 mm	9	Variable	11 m	Variable	28
4	20 mm	10	2980 mm	30 m	2980 mm	73
5	20 mm	4	Variable	14 m	Variable	34
6	20 mm	5	Variable	24 m	Variable	58
7	20 mm	8	Variable	41 m	Variable	102
8	20 mm	8	Variable	41 m	Variable	102
9	20 mm	5	Variable	24 m	Variable	58
10	20 mm	10	2970 mm	30 m	2970 mm	73
11	20 mm	4	Variable	14 m	Variable	34
12	20 mm	50	3750 mm	188 m	3750 mm	462
13	20 mm	16	7470 mm	120 m	7470 mm	295
14	20 mm	48	12000 mm	576 m	12000 mm	1421
15	20 mm	4	5650 mm	23 m	5650 mm	56
16	20 mm	1	2430 mm	2 m	2430 mm	6
17	20 mm	1	4300 mm	4 m	4300 mm	11
18	20 mm	22	3730 mm	82 m	3730 mm	202
19	20 mm	24	7650 mm	184 m	7650 mm	453
20	20 mm	14	5850 mm	82 m	5850 mm	202
21	20 mm	22	3050 mm	67 m	3050 mm	165
22	20 mm	21	Variable	73 m	Variable	180
23	20 mm	96	2500 mm	240 m	2500 mm	592
24	20 mm	64	2550 mm	163 m	2550 mm	402
25	20 mm	40	7250 mm	290 m	7250 mm	715
26	20 mm	8	7450 mm	60 m	7450 mm	147
27	20 mm	6	7000 mm	42 m	7000 mm	104
28	20 mm	36	4000 mm	144 m	4000 mm	355
29	20 mm	26	2180 mm	57 m	2180 mm	140
30	20 mm	26	2400 mm	62 m	2400 mm	154
31	20 mm	60	3600 mm	216 m	3600 mm	533
32	20 mm	6	1770 mm	11 m	1770 mm	26
33	20 mm	34	2170 mm	74 m	2170 mm	182
34	20 mm	40	3370 mm	135 m	3370 mm	332
35	20 mm	28	2000 mm	56 m	2000 mm	138
36	20 mm	4	2720 mm	11 m	2720 mm	27
37	20 mm	4	630 mm	3 m	630 mm	6
38	20 mm	4	1380 mm	6 m	1380 mm	14
39	20 mm	20	3380 mm	68 m	3380 mm	167
40	20 mm	12	1980 mm	24 m	1980 mm	59
41	20 mm	4	2380 mm	10 m	2380 mm	23
42	20 mm	2	2730 mm	5 m	2730 mm	13
43	20 mm	2	620 mm	1 m	620 mm	3
44	20 mm	9	Variable	11 m	Variable	28
45	20 mm	9	Variable	11 m	Variable	28
46	20 mm	4	Variable	14 m	Variable	34
47	20 mm	5	Variable	24 m	Variable	58
48	20 mm	8	Variable	41 m	Variable	102
49	20 mm	8	Variable	41 m	Variable	102
50	20 mm	5	Variable	24 m	Variable	58
51	20 mm	4	Variable	14 m	Variable	34
1335		6289 m		15511		



1 First Floor Slab Additional Top Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاث الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
First Floor Slab Additional Top Reinforcement

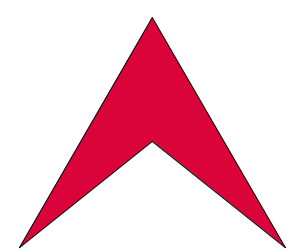
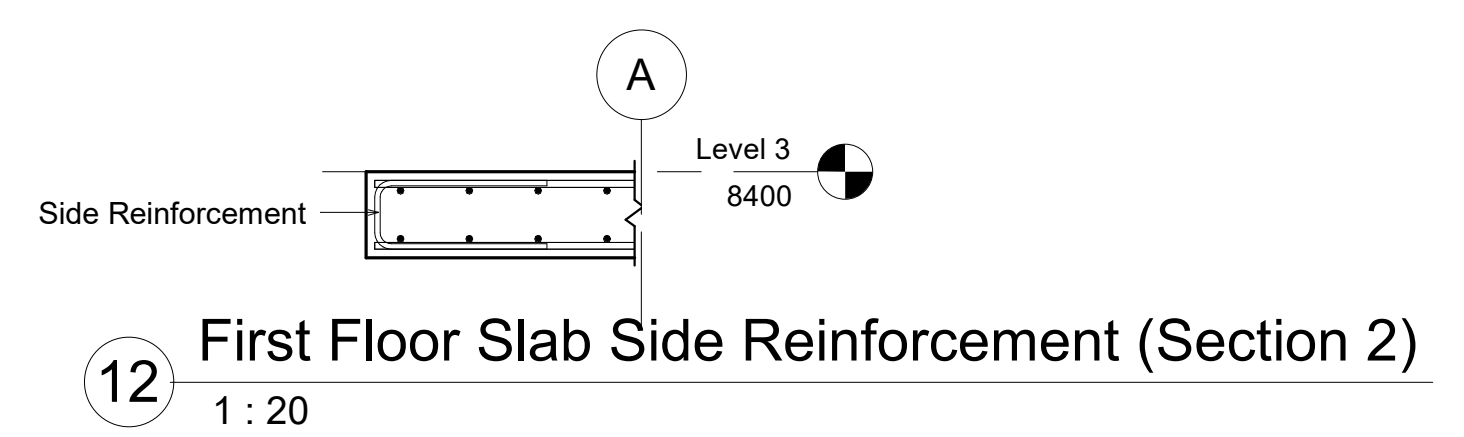
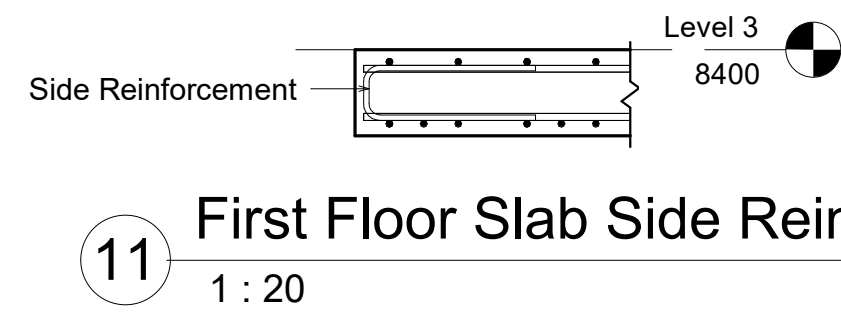
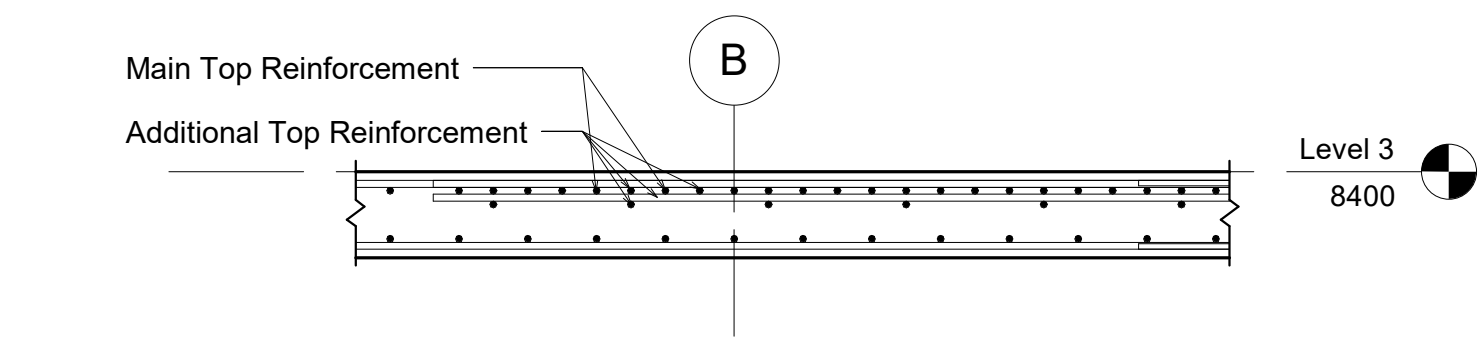
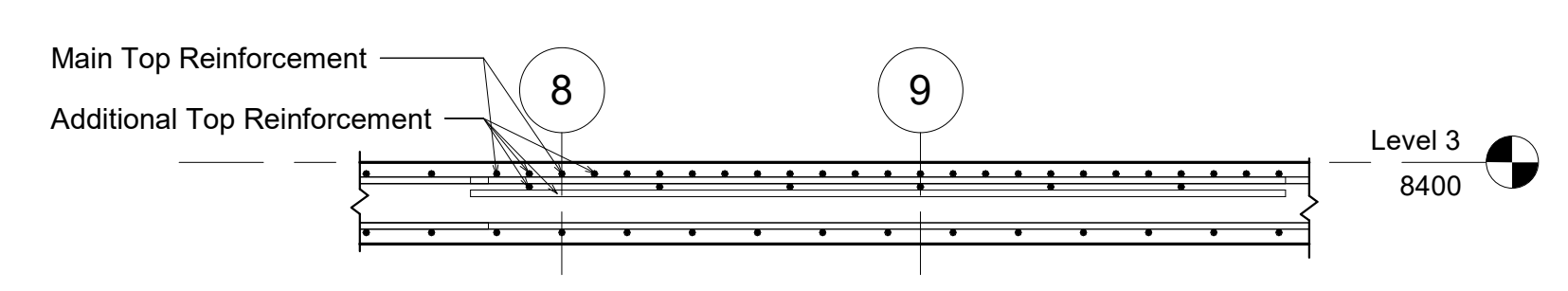
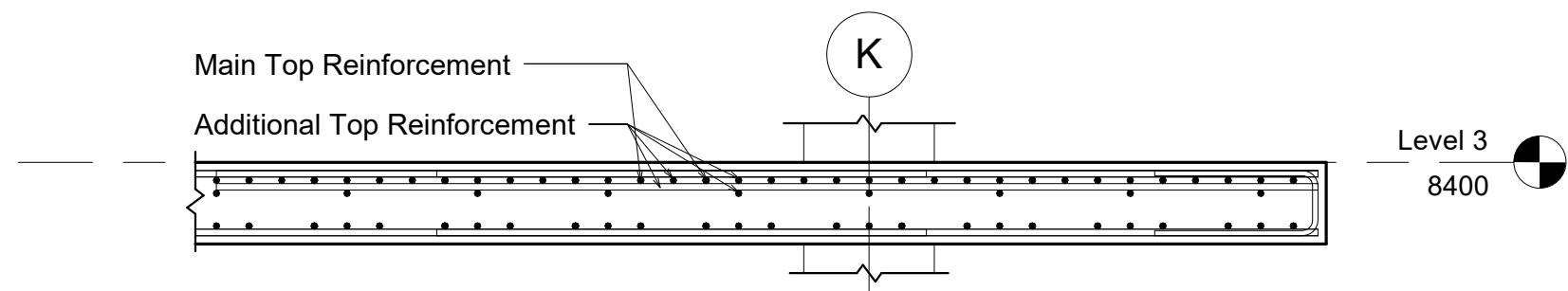
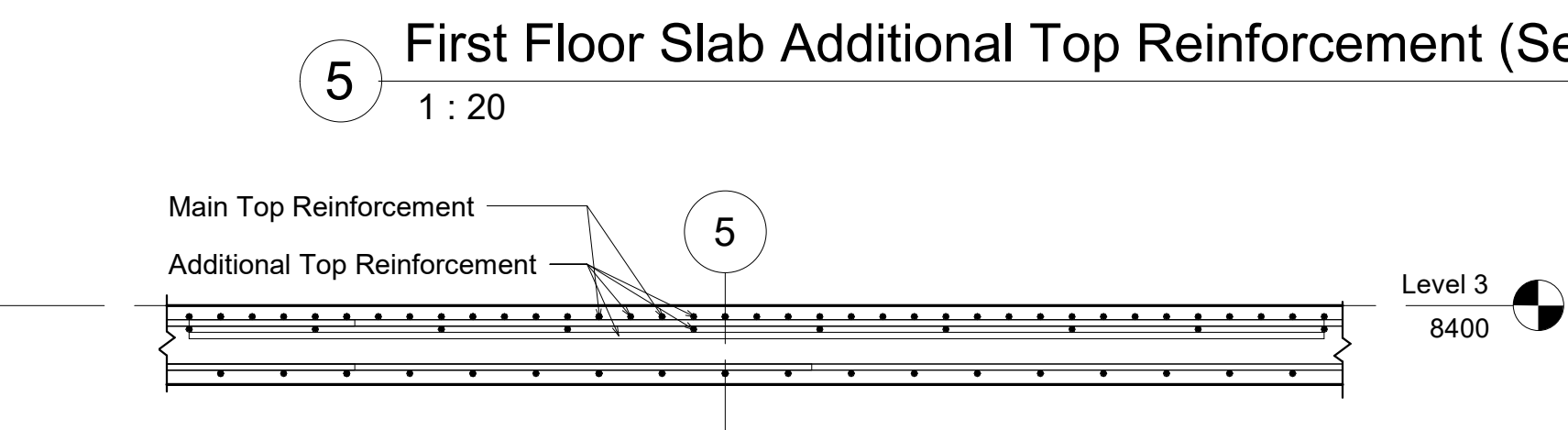
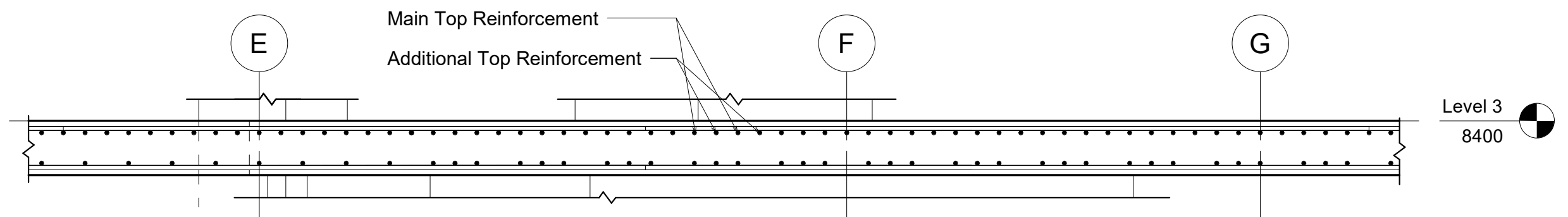
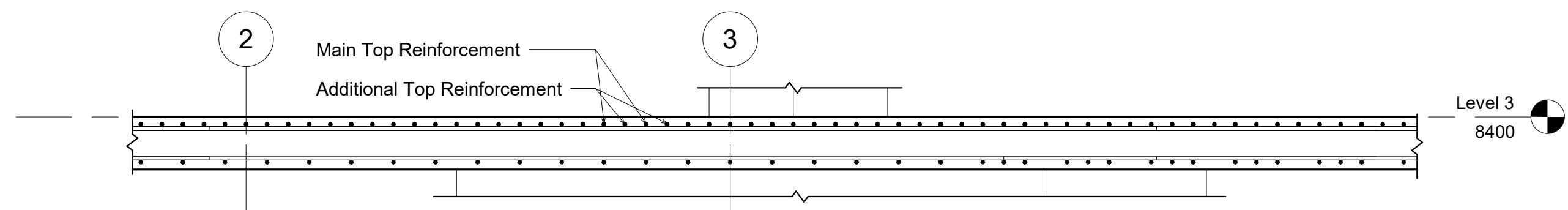
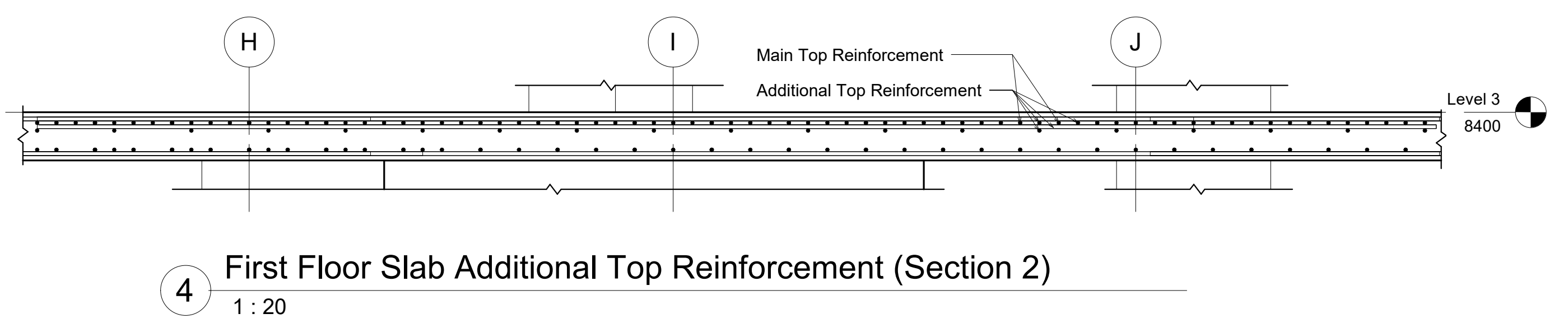
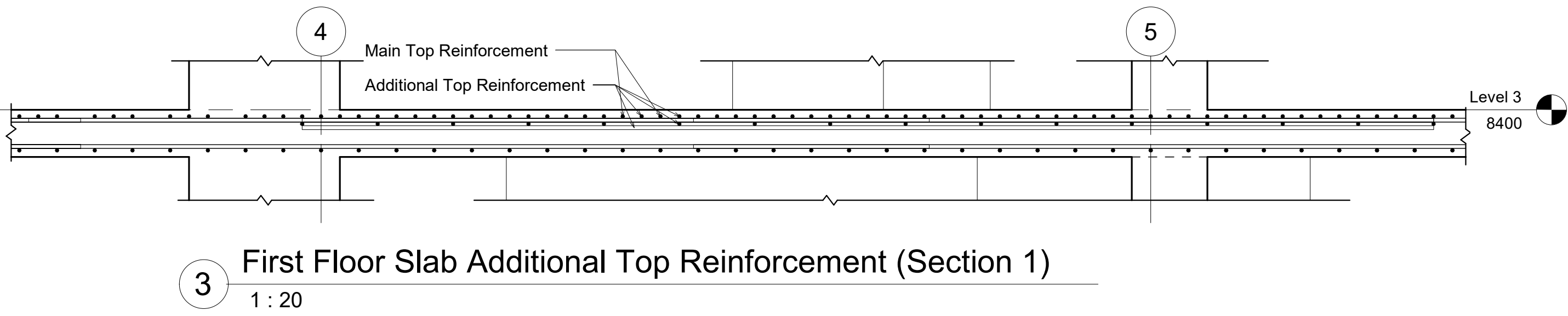
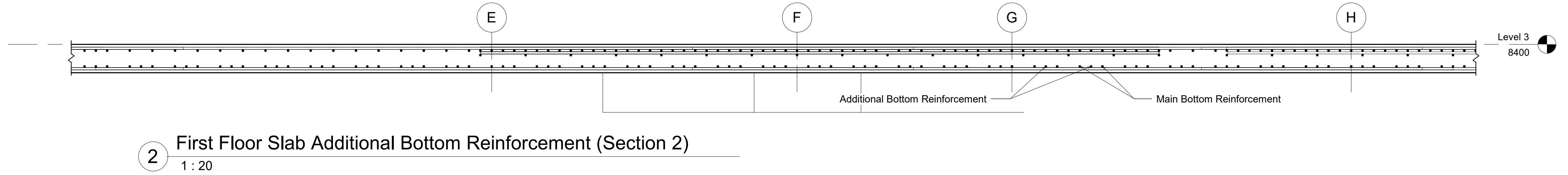
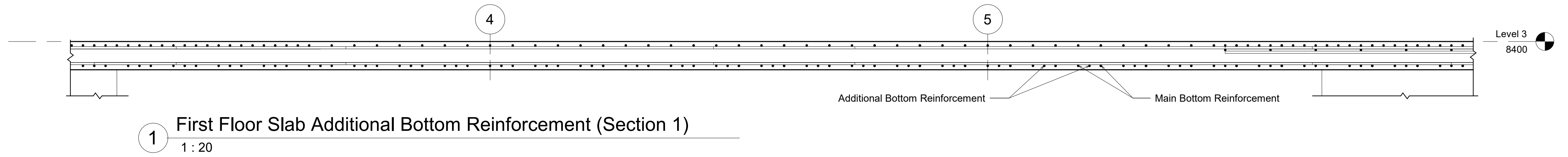
ST-RT-74-00

SCALE: 1 : 100

DATE: February 2021

DESIGNED: Refaat Elburki

DRAWN: Awad Edrees



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka البركة
Jamal Abdalnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



Rev.	AMENDMENT	DATE

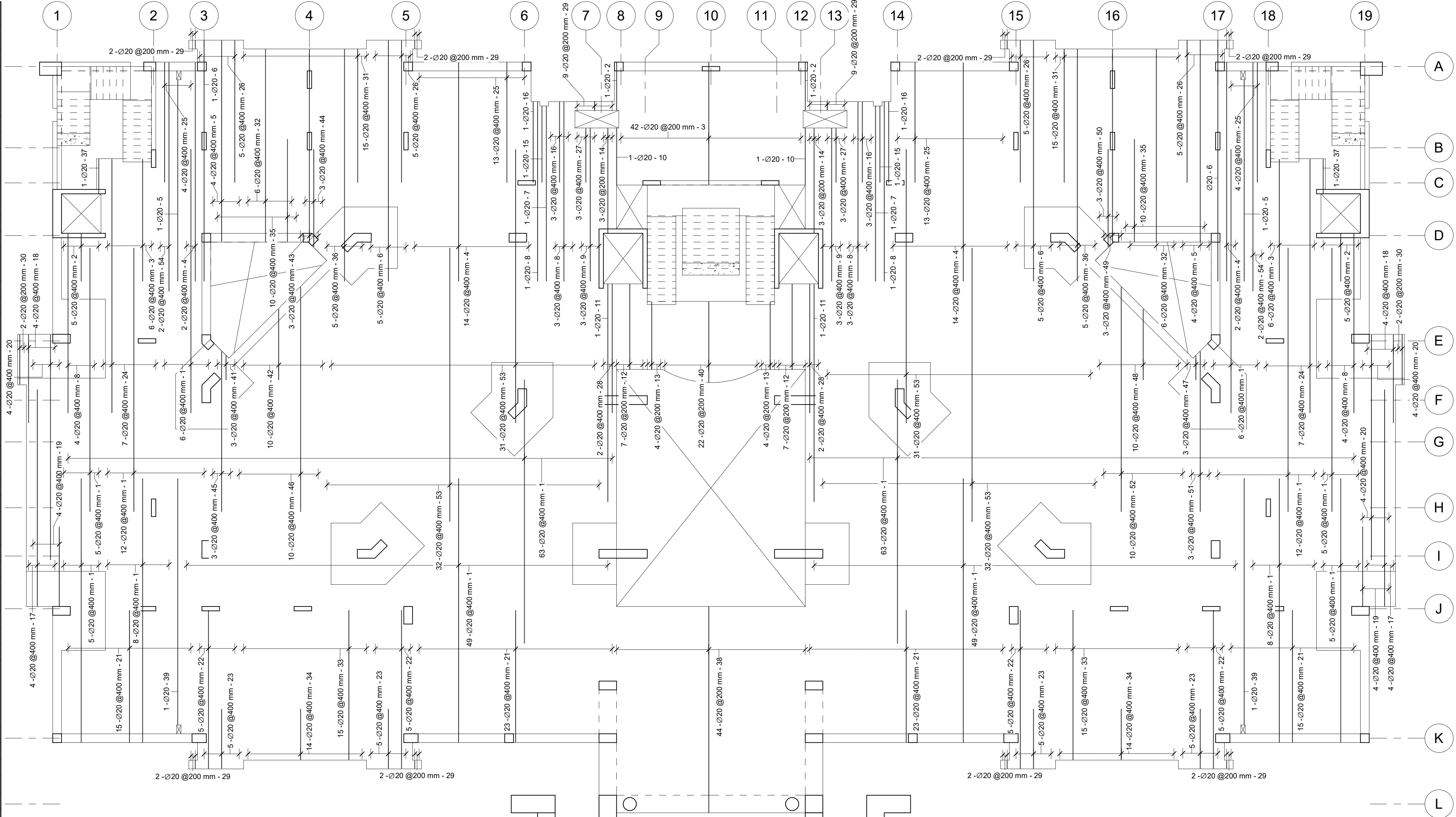
Court of Benghazi North
Benghazi

First Floor Slab Reinforcement Details

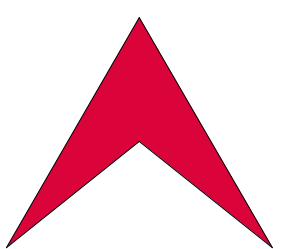
ST-RT-75-00

SCALE: 1 : 20	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	

Second Floor Slab Main Bottom Reinforcement (Major Direction) Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	296	12000 mm	3552 m	12000 mm	8760	
2	20 mm	12	2150 mm	26 m	2150 mm	64	
3	20 mm	54	5550 mm	300 m	5550 mm	739	
4	20 mm	32	9950 mm	318 m	9950 mm	785	
5	20 mm	10	9150 mm	92 m	9150 mm	226	
6	20 mm	12	10950 mm	131 m	10950 mm	324	
7	20 mm	2	7950 mm	16 m	7950 mm	39	
8	20 mm	16	8150 mm	130 m	8150 mm	322	
9	20 mm	6	6950 mm	42 m	6950 mm	103	
10	20 mm	2	2550 mm	5 m	2550 mm	13	
11	20 mm	2	9900 mm	20 m	9900 mm	49	
12	20 mm	14	3850 mm	54 m	3850 mm	133	
13	20 mm	8	3050 mm	24 m	3050 mm	60	
14	20 mm	6	4750 mm	29 m	4750 mm	70	
15	20 mm	2	3450 mm	7 m	3450 mm	17	
16	20 mm	8	3650 mm	29 m	3650 mm	72	
17	20 mm	8	9850 mm	79 m	9850 mm	194	
18	20 mm	8	4000 mm	32 m	4000 mm	79	
19	20 mm	8	3600 mm	29 m	3600 mm	71	
20	20 mm	8	10250 mm	82 m	10250 mm	202	
21	20 mm	76	6000 mm	456 m	6000 mm	1125	
22	20 mm	20	7200 mm	144 m	7200 mm	355	
23	20 mm	20	2700 mm	54 m	2700 mm	133	
24	20 mm	14	11550 mm	162 m	11550 mm	399	
25	20 mm	34	5450 mm	185 m	5450 mm	457	
26	20 mm	20	6450 mm	129 m	6450 mm	318	
27	20 mm	6	2450 mm	15 m	2450 mm	36	
28	20 mm	4	5850 mm	23 m	5850 mm	58	
29	20 mm	34	350 mm	12 m	350 mm	29	
30	20 mm	4	2250 mm	9 m	2250 mm	22	
31	20 mm	30	6050 mm	182 m	6050 mm	448	
32	20 mm	12	8750 mm	105 m	8750 mm	259	
33	20 mm	30	6800 mm	204 m	6800 mm	503	
34	20 mm	28	2300 mm	64 m	2300 mm	159	
35	20 mm	20	4650 mm	93 m	4650 mm	229	
36	20 mm	10	10550 mm	106 m	10550 mm	260	
37	20 mm	2	1550 mm	3 m	1550 mm	8	
38	20 mm	44	9350 mm	411 m	9350 mm	1015	
39	20 mm	2	11200 mm	22 m	11200 mm	55	
40	20 mm	22	Variable	76 m	Variable	187	
41	20 mm	3	Variable	3 m	Variable	8	
42	20 mm	10	Variable	34 m	Variable	84	
43	20 mm	3	Variable	26 m	Variable	65	
44	20 mm	3	Variable	13 m	Variable	33	
45	20 mm	3	Variable	22 m	Variable	54	
46	20 mm	10	Variable	92 m	Variable	227	
47	20 mm	3	Variable	3 m	Variable	8	
48	20 mm	10	Variable	34 m	Variable	84	
49	20 mm	3	Variable	26 m	Variable	65	
50	20 mm	3	Variable	13 m	Variable	33	
51	20 mm	3	Variable	22 m	Variable	54	
52	20 mm	10	Variable	92 m	Variable	227	
53	20 mm	126	12450 mm	1569 m	12450 mm	3869	
54	20 mm	4	10400 mm	42 m	10400 mm	103	
1140		9444 m		23291			



1 Second Floor Slab Main Bottom Reinforcement (Major Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi

Second Floor Slab Main Bottom Reinforcement (Major Direction)

ST-RT-76-00

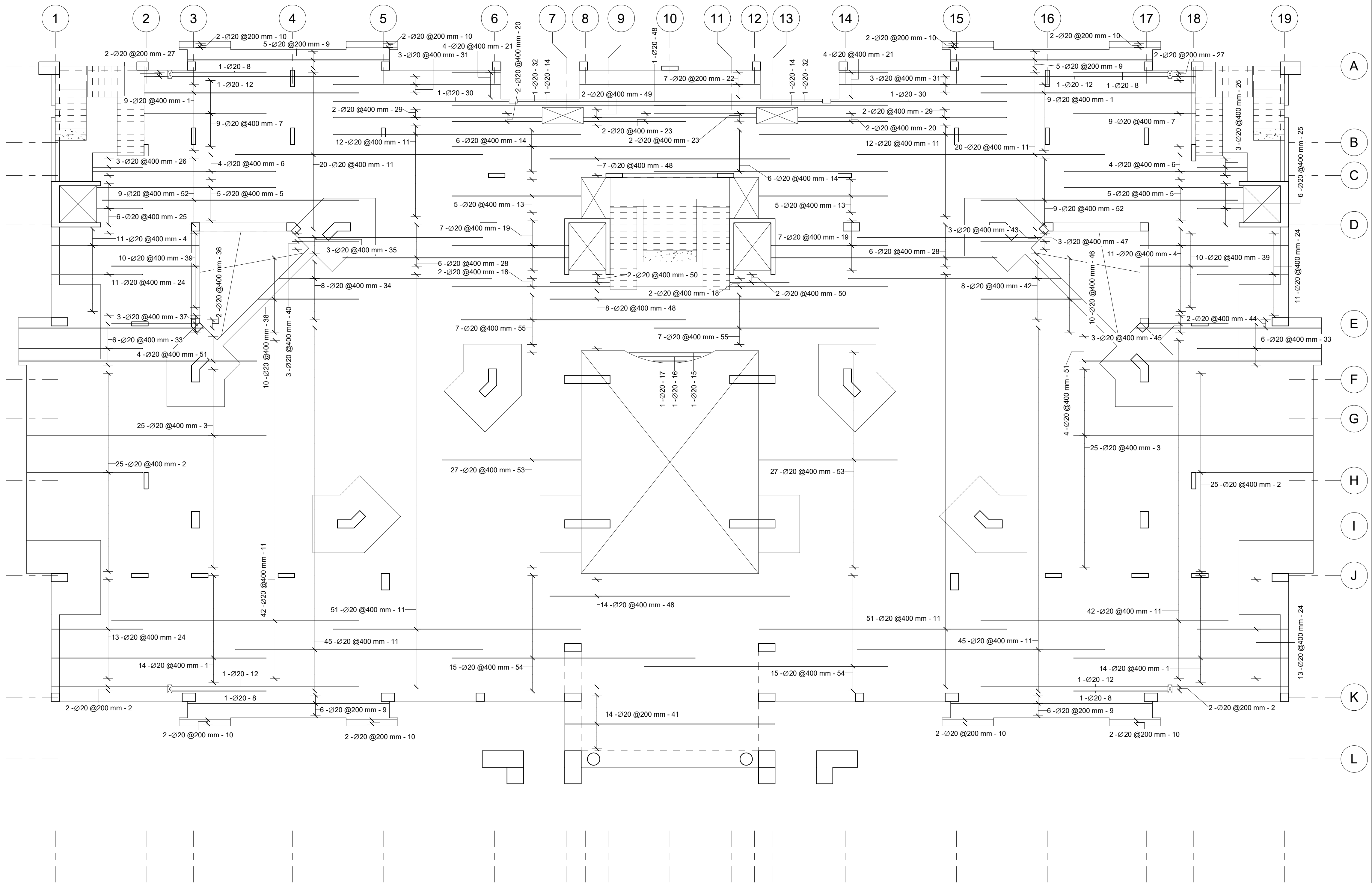
SCALE: 1 : 100

DATE: February 2021

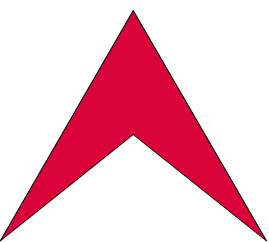
DESIGNED: Refaat Elburki

DRAWN: Awad Edrees

Second Floor Slab Main Bottom Reinforcement (Minor Direction) Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	46	10400 mm	478 m	10400 mm	1180
2	20 mm	54	5600 mm	302 m	5600 mm	746
3	20 mm	50	11600 mm	580 m	11600 mm	1430
4	20 mm	22	7150 mm	157 m	7150 mm	388
5	20 mm	10	8650 mm	87 m	8650 mm	213
6	20 mm	8	8850 mm	71 m	8850 mm	175
7	20 mm	18	5900 mm	106 m	5900 mm	262
8	20 mm	4	4550 mm	18 m	4550 mm	45
9	20 mm	22	9750 mm	215 m	9750 mm	529
10	20 mm	16	2450 mm	39 m	2450 mm	97
11	20 mm	340	12000 mm	4080 m	12000 mm	10062
12	20 mm	4	9050 mm	36 m	9050 mm	89
13	20 mm	10	6250 mm	63 m	6250 mm	154
14	20 mm	14	11350 mm	159 m	11350 mm	392
15	20 mm	1	3930 mm	4 m	3930 mm	10
16	20 mm	1	3030 mm	3 m	3030 mm	7
17	20 mm	1	1600 mm	2 m	1600 mm	4
18	20 mm	4	7650 mm	31 m	7650 mm	75
19	20 mm	14	5650 mm	79 m	5650 mm	195
20	20 mm	4	4350 mm	17 m	4350 mm	43
21	20 mm	8	2350 mm	19 m	2350 mm	46
22	20 mm	7	8750 mm	61 m	8750 mm	151
23	20 mm	4	4950 mm	20 m	4950 mm	49
24	20 mm	48	4400 mm	211 m	4400 mm	521
25	20 mm	12	2200 mm	26 m	2200 mm	65
26	20 mm	6	2400 mm	14 m	2400 mm	36
27	20 mm	4	1100 mm	4 m	1100 mm	11
28	20 mm	12	10950 mm	131 m	10950 mm	324
29	20 mm	4	10100 mm	40 m	10100 mm	100
30	20 mm	2	8500 mm	17 m	8500 mm	42
31	20 mm	6	8100 mm	49 m	8100 mm	120
32	20 mm	2	3000 mm	6 m	3000 mm	15
33	20 mm	12	6000 mm	72 m	6000 mm	178
34	20 mm	8	Variable	87 m	Variable	215
35	20 mm	3	Variable	26 m	Variable	63
36	20 mm	2	Variable	18 m	Variable	43
37	20 mm	3	Variable	13 m	Variable	32
38	20 mm	10	Variable	47 m	Variable	115
39	20 mm	20	4250 mm	85 m	4250 mm	210
40	20 mm	3	Variable	8 m	Variable	20
41	20 mm	14	10150 mm	142 m	10150 mm	350
42	20 mm	8	Variable	87 m	Variable	215
43	20 mm	3	Variable	26 m	Variable	63
44	20 mm	2	Variable	18 m	Variable	43
45	20 mm	3	Variable	13 m	Variable	32
46	20 mm	10	Variable	47 m	Variable	115
47	20 mm	3	Variable	8 m	Variable	20
48	20 mm	30	11650 mm	350 m	11650 mm	862
49	20 mm	2	8350 mm	17 m	8350 mm	41
50	20 mm	4	2850 mm	11 m	2850 mm	28
51	20 mm	8	11550 mm	92 m	11550 mm	228
52	20 mm	18	12450 mm	224 m	12450 mm	553
53	20 mm	54	6700 mm	362 m	6700 mm	892
54	20 mm	30	11800 mm	354 m	11800 mm	873
55	20 mm	14	10900 mm	153 m	10900 mm	376
1022				9384 m		23143



1 Second Floor Slab Main Bottom Reinforcement (Minor Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka البركة
Jamal Abdalnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

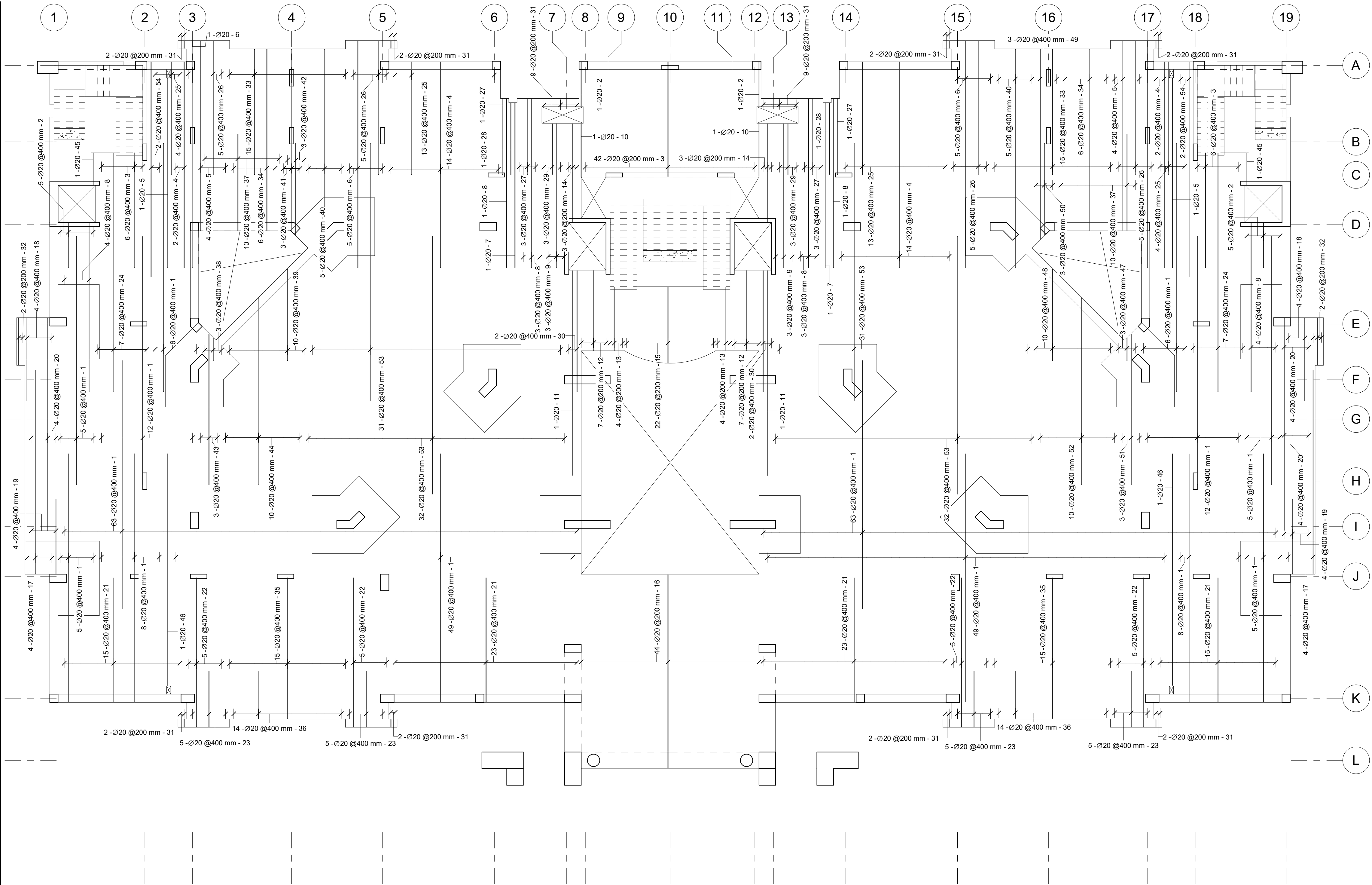
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Second Floor Slab Main Bottom Reinforcement (Minor Direction)

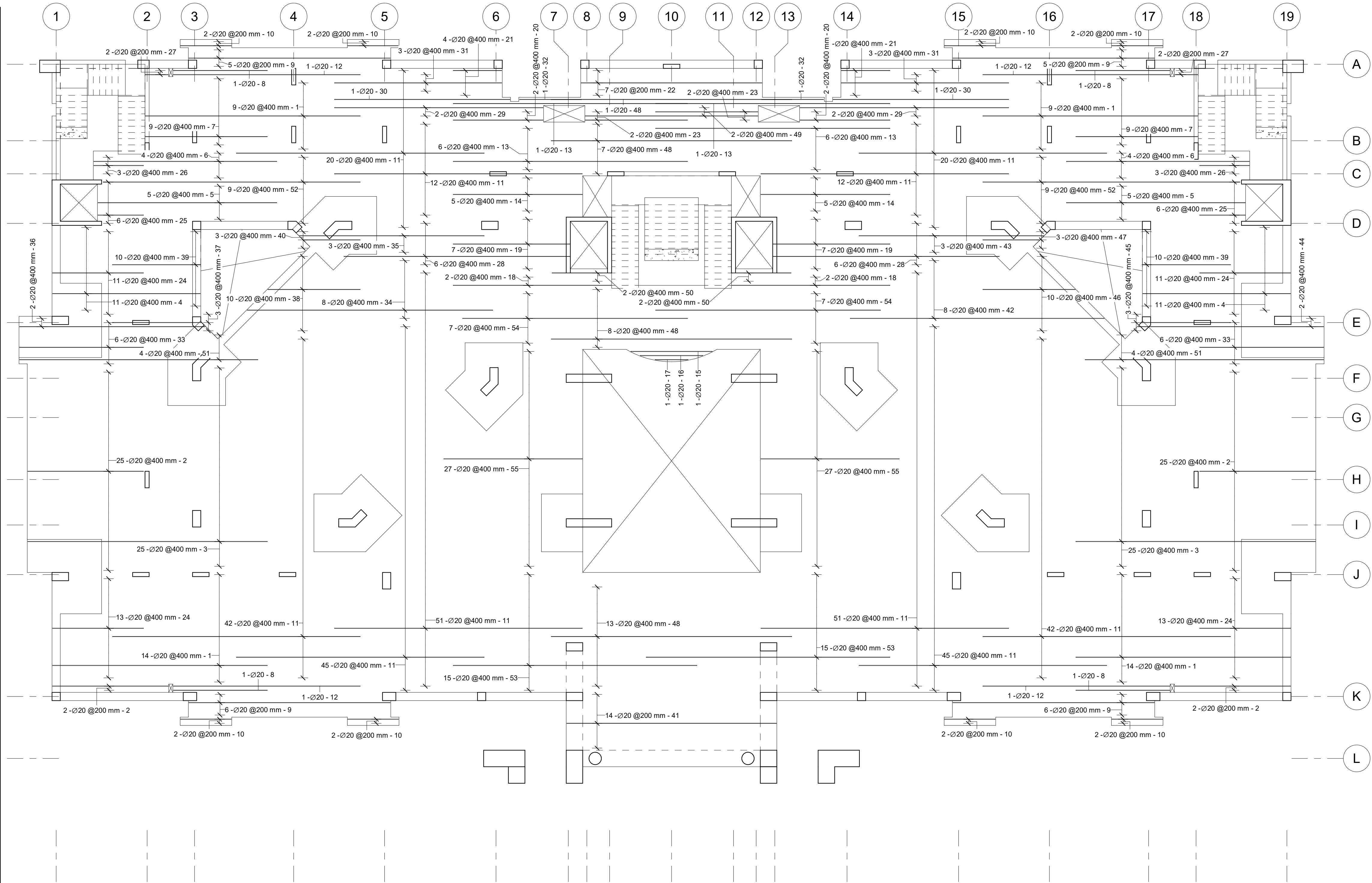
ST-RT-77-00

SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	

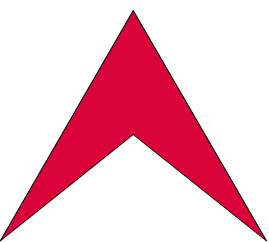
Second Floor Slab Main Top Reinforcement (Major Direction) Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	296	12000 mm	3552 m	12000 mm	8760	
2	20 mm	12	2150 mm	26 m	2150 mm	64	
3	20 mm	54	5550 mm	300 m	5550 mm	739	
4	20 mm	32	9950 mm	318 m	9950 mm	785	
5	20 mm	10	9150 mm	92 m	9150 mm	226	
6	20 mm	12	10950 mm	131 m	10950 mm	324	
7	20 mm	2	7950 mm	16 m	7950 mm	39	
8	20 mm	16	8150 mm	130 m	8150 mm	322	
9	20 mm	6	6950 mm	42 m	6950 mm	103	
10	20 mm	2	2550 mm	5 m	2550 mm	13	
11	20 mm	2	9900 mm	20 m	9900 mm	49	
12	20 mm	14	3850 mm	54 m	3850 mm	133	
13	20 mm	8	3050 mm	24 m	3050 mm	60	
14	20 mm	6	4750 mm	29 m	4750 mm	70	
15	20 mm	22	Variable	76 m	Variable	187	
16	20 mm	44	9350 mm	411 m	9350 mm	1015	
17	20 mm	8	9850 mm	79 m	9850 mm	194	
18	20 mm	8	4000 mm	32 m	4000 mm	79	
19	20 mm	8	3600 mm	29 m	3600 mm	71	
20	20 mm	8	10250 mm	82 m	10250 mm	202	
21	20 mm	76	6000 mm	456 m	6000 mm	1125	
22	20 mm	20	7200 mm	144 m	7200 mm	355	
23	20 mm	20	2700 mm	54 m	2700 mm	133	
24	20 mm	14	11550 mm	162 m	11550 mm	399	
25	20 mm	34	5450 mm	185 m	5450 mm	457	
26	20 mm	20	6450 mm	129 m	6450 mm	318	
27	20 mm	8	3650 mm	29 m	3650 mm	72	
28	20 mm	2	3450 mm	7 m	3450 mm	17	
29	20 mm	6	2450 mm	15 m	2450 mm	36	
30	20 mm	4	5850 mm	23 m	5850 mm	58	
31	20 mm	34	350 mm	12 m	350 mm	29	
32	20 mm	4	2250 mm	9 m	2250 mm	22	
33	20 mm	30	6050 mm	182 m	6050 mm	448	
34	20 mm	12	8750 mm	105 m	8750 mm	259	
35	20 mm	30	6800 mm	204 m	6800 mm	503	
36	20 mm	28	2300 mm	64 m	2300 mm	159	
37	20 mm	20	4650 mm	93 m	4650 mm	229	
38	20 mm	3	Variable	3 m	Variable	8	
39	20 mm	10	Variable	34 m	Variable	84	
40	20 mm	10	Variable	26 m	Variable	65	
41	20 mm	3	Variable	13 m	Variable	33	
42	20 mm	3	Variable	22 m	Variable	54	
43	20 mm	10	Variable	92 m	Variable	227	
44	20 mm	2	Variable	3 m	Variable	8	
45	20 mm	2	Variable	3 m	Variable	8	
46	20 mm	2	Variable	3 m	Variable	8	
47	20 mm	3	Variable	3 m	Variable	8	
48	20 mm	10	Variable	34 m	Variable	84	
49	20 mm	3	Variable	26 m	Variable	65	
50	20 mm	3	Variable	13 m	Variable	33	
51	20 mm	3	Variable	22 m	Variable	54	
52	20 mm	10	Variable	92 m	Variable	227	
53	20 mm	126	12450 mm	1569 m	12450 mm	3869	
54	20 mm	4	10400 mm	42 m	10400 mm	103	
1140		9444 m		23291			



Second Floor Slab Main Top Reinforcement (Minor Direction) Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	46	10400 mm	478 m	10400 mm	1180	
2	20 mm	54	5600 mm	302 m	5600 mm	746	
3	20 mm	50	11600 mm	580 m	11600 mm	1430	
4	20 mm	22	7150 mm	157 m	7150 mm	388	
5	20 mm	10	8650 mm	87 m	8650 mm	213	
6	20 mm	8	8850 mm	71 m	8850 mm	175	
7	20 mm	18	5900 mm	106 m	5900 mm	262	
8	20 mm	4	4550 mm	18 m	4550 mm	45	
9	20 mm	22	9750 mm	215 m	9750 mm	529	
10	20 mm	16	2450 mm	39 m	2450 mm	97	
11	20 mm	340	12000 mm	4080 m	12000 mm	10062	
12	20 mm	4	9050 mm	36 m	9050 mm	89	
13	20 mm	14	11350 mm	159 m	11350 mm	392	
14	20 mm	10	6250 mm	63 m	6250 mm	154	
15	20 mm	1	3930 mm	4 m	3930 mm	10	
16	20 mm	1	3030 mm	3 m	3030 mm	7	
17	20 mm	1	1600 mm	2 m	1600 mm	4	
18	20 mm	4	7650 mm	31 m	7650 mm	75	
19	20 mm	14	5650 mm	79 m	5650 mm	195	
20	20 mm	4	4350 mm	17 m	4350 mm	43	
21	20 mm	8	2350 mm	19 m	2350 mm	46	
22	20 mm	7	8750 mm	61 m	8750 mm	151	
23	20 mm	4	4950 mm	20 m	4950 mm	49	
24	20 mm	48	4400 mm	211 m	4400 mm	521	
25	20 mm	12	2200 mm	26 m	2200 mm	65	
26	20 mm	6	2400 mm	14 m	2400 mm	36	
27	20 mm	4	1100 mm	4 m	1100 mm	11	
28	20 mm	12	10950 mm	131 m	10950 mm	324	
29	20 mm	4	10100 mm	40 m	10100 mm	100	
30	20 mm	2	8500 mm	17 m	8500 mm	42	
31	20 mm	6	8100 mm	49 m	8100 mm	120	
32	20 mm	2	3000 mm	6 m	3000 mm	15	
33	20 mm	12	6000 mm	72 m	6000 mm	178	
34	20 mm	8	Variable	87 m	Variable	215	
35	20 mm	3	Variable	26 m	Variable	63	
36	20 mm	2	Variable	18 m	Variable	43	
37	20 mm	3	Variable	13 m	Variable	32	
38	20 mm	10	Variable	47 m	Variable	115	
39	20 mm	20	4250 mm	85 m	4250 mm	210	
40	20 mm	3	Variable	8 m	Variable	20	
41	20 mm	14	10150 mm	142 m	10150 mm	350	
42	20 mm	8	Variable	87 m	Variable	215	
43	20 mm	3	Variable	26 m	Variable	63	
44	20 mm	2	Variable	18 m	Variable	43	
45	20 mm	3	Variable	13 m	Variable	32	
46	20 mm	10	Variable	47 m	Variable	115	
47	20 mm	3	Variable	8 m	Variable	20	
48	20 mm	29	11650 mm	338 m	11650 mm	833	
49	20 mm	2	8350 mm	17 m	8350 mm	41	
50	20 mm	4	2850 mm	11 m	2850 mm	28	
51	20 mm	8	11550 mm	92 m	11550 mm	228	
52	20 mm	18	12450 mm	224 m	12450 mm	553	
53	20 mm	30	11800 mm	354 m	11800 mm	873	
54	20 mm	14	10900 mm	153 m	10900 mm	376	
55	20 mm	54	6700 mm	362 m	6700 mm	892	
1021		9373 m		23114			



1 Second Floor Slab Main Top Reinforcement (Minor Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاث الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi

Second Floor Slab Main Top Reinforcement (Minor Direction)

ST-RT-79-00

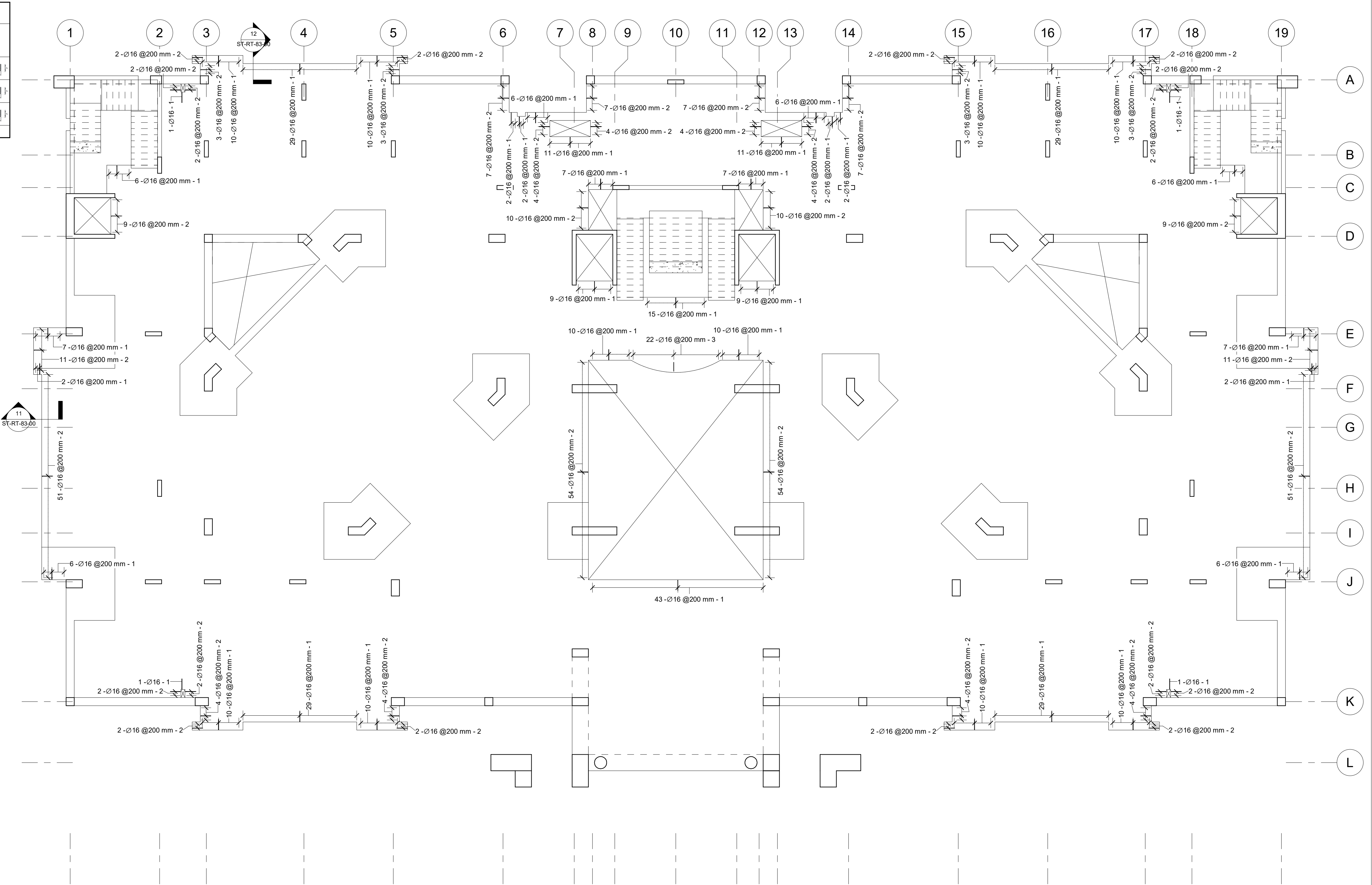
SCALE: 1 : 100

DATE: February 2021

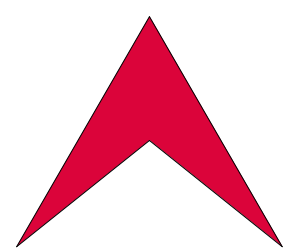
DESIGNED: Refaat Elburki

DRAWN: Awad Edrees

Second Floor Slab Side Rebar Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C
1	16 mm	394	1130 mm	445 m	500 mm	200 mm	500 mm
2	16 mm	374	1090 mm	408 m	500 mm	160 mm	500 mm
3	16 mm	22		23 m		200 mm	
		790		876 m			1382



1 Second Floor Slab Side Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



Rev.	AMENDMENT	DATE

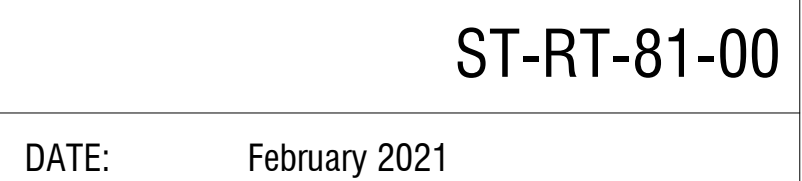
Court of Benghazi North
Benghazi
Second Floor Slab Side Reinforcement

ST-RT-80-00

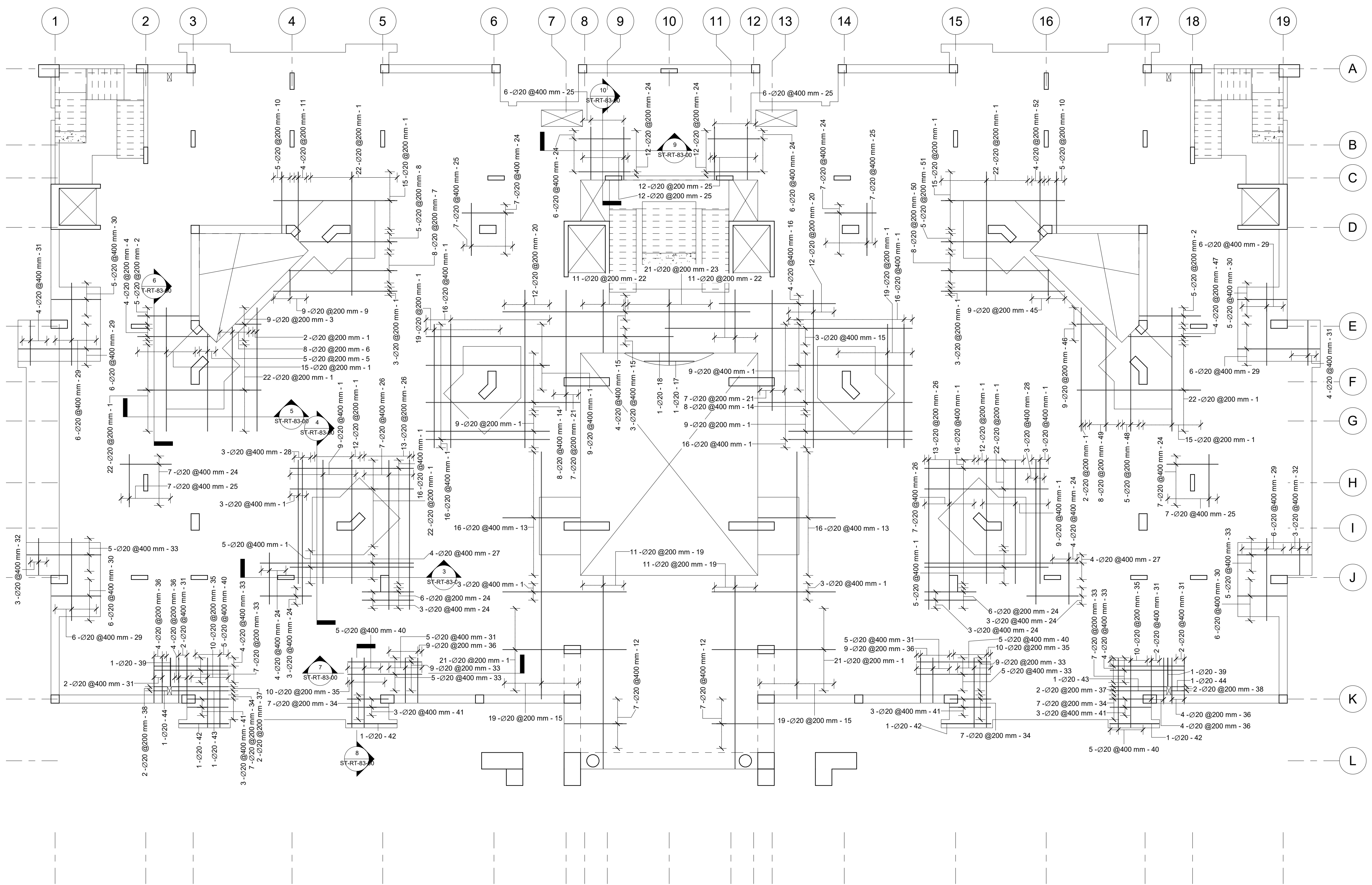
SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	

[illegible]

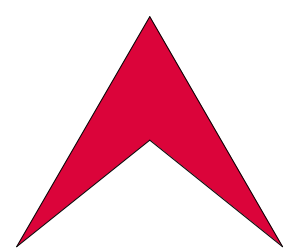
1



Second Floor Slab Additional Top Reinforcement Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	478	6000 mm	2868 m	6000 mm	7073
2	20 mm	10	2980 mm	30 m	2980 mm	73
3	20 mm	9	Variable	11 m	Variable	28
4	20 mm	4	Variable	14 m	Variable	34
5	20 mm	5	Variable	24 m	Variable	58
6	20 mm	8	Variable	41 m	Variable	102
7	20 mm	8	Variable	41 m	Variable	102
8	20 mm	5	Variable	24 m	Variable	58
9	20 mm	9	Variable	11 m	Variable	28
10	20 mm	10	2970 mm	30 m	2970 mm	73
11	20 mm	4	Variable	14 m	Variable	34
12	20 mm	14	3000 mm	42 m	3000 mm	104
13	20 mm	32	3750 mm	120 m	3750 mm	296
14	20 mm	16	7470 mm	120 m	7470 mm	295
15	20 mm	48	12000 mm	576 m	12000 mm	1421
16	20 mm	4	5650 mm	23 m	5650 mm	56
17	20 mm	1	2430 mm	2 m	2430 mm	6
18	20 mm	1	4300 mm	4 m	4300 mm	11
19	20 mm	22	9350 mm	206 m	9350 mm	507
20	20 mm	24	7650 mm	184 m	7650 mm	453
21	20 mm	14	5850 mm	82 m	5850 mm	202
22	20 mm	22	3050 mm	67 m	3050 mm	165
23	20 mm	21	Variable	73 m	Variable	180
24	20 mm	96	2500 mm	240 m	2500 mm	592
25	20 mm	64	2550 mm	163 m	2550 mm	402
26	20 mm	40	7250 mm	290 m	7250 mm	715
27	20 mm	8	7450 mm	60 m	7450 mm	147
28	20 mm	6	7000 mm	42 m	7000 mm	104
29	20 mm	36	4000 mm	144 m	4000 mm	355
30	20 mm	26	2400 mm	62 m	2400 mm	154
31	20 mm	26	2180 mm	57 m	2180 mm	140
32	20 mm	6	1770 mm	11 m	1770 mm	26
33	20 mm	60	3600 mm	216 m	3600 mm	533
34	20 mm	28	2000 mm	56 m	2000 mm	138
35	20 mm	40	3370 mm	135 m	3370 mm	332
36	20 mm	34	2170 mm	74 m	2170 mm	182
37	20 mm	4	2720 mm	11 m	2720 mm	27
38	20 mm	4	630 mm	3 m	630 mm	6
39	20 mm	4	1380 mm	6 m	1380 mm	14
40	20 mm	20	3380 mm	68 m	3380 mm	167
41	20 mm	12	1980 mm	24 m	1980 mm	59
42	20 mm	4	2380 mm	10 m	2380 mm	23
43	20 mm	2	2730 mm	5 m	2730 mm	13
44	20 mm	2	620 mm	1 m	620 mm	3
45	20 mm	9	Variable	11 m	Variable	28
46	20 mm	9	Variable	11 m	Variable	28
47	20 mm	4	Variable	14 m	Variable	34
48	20 mm	5	Variable	24 m	Variable	58
49	20 mm	8	Variable	41 m	Variable	102
50	20 mm	8	Variable	41 m	Variable	102
51	20 mm	5	Variable	24 m	Variable	58
52	20 mm	4	Variable	14 m	Variable	34
1343		6460 m		15930		



1 Second Floor Slab Additional Top Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka البركة
Jamal Abdalnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Second Floor Slab Additional Top Reinforcement

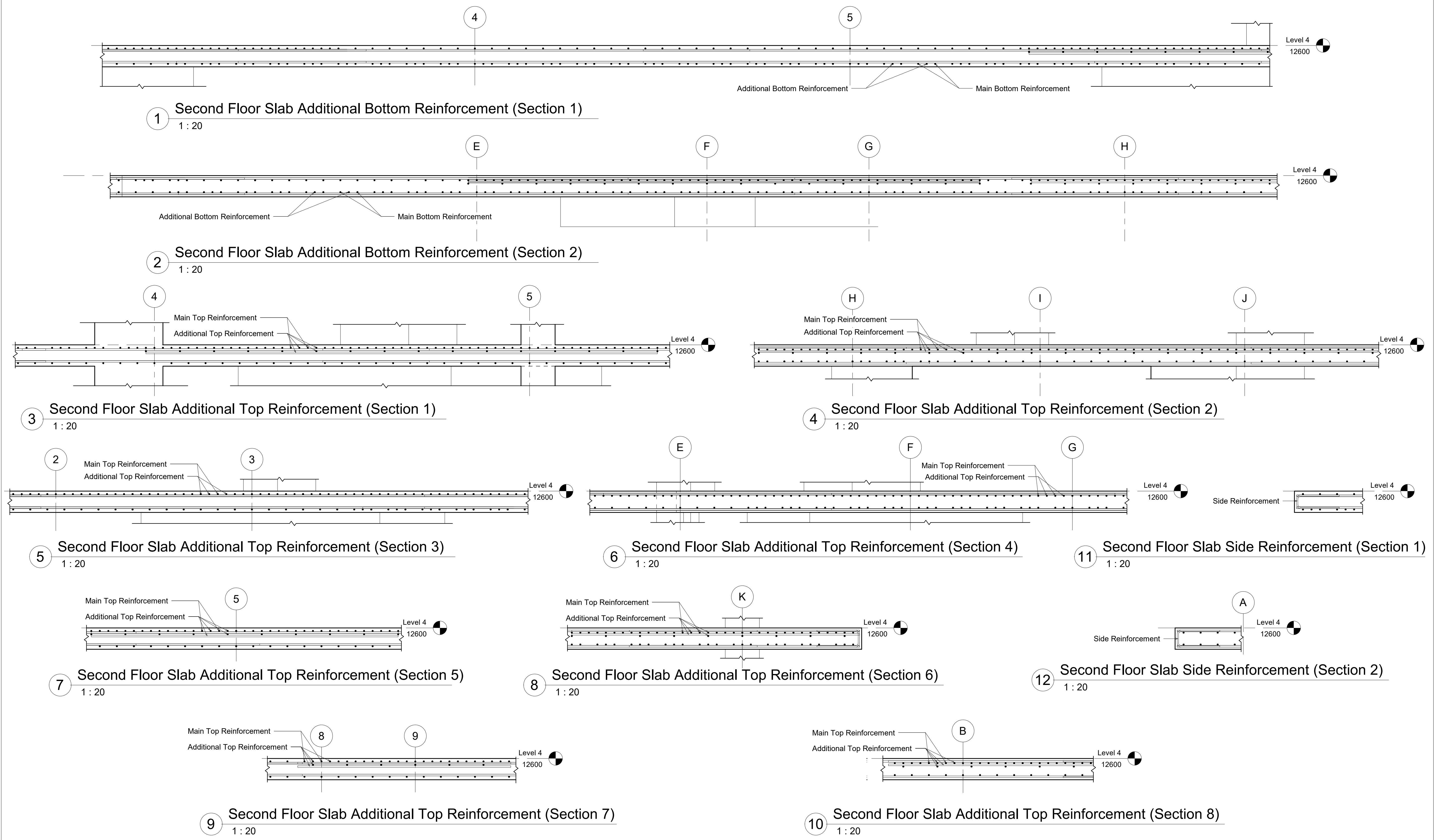
ST-RT-82-00

SCALE: 1 : 100

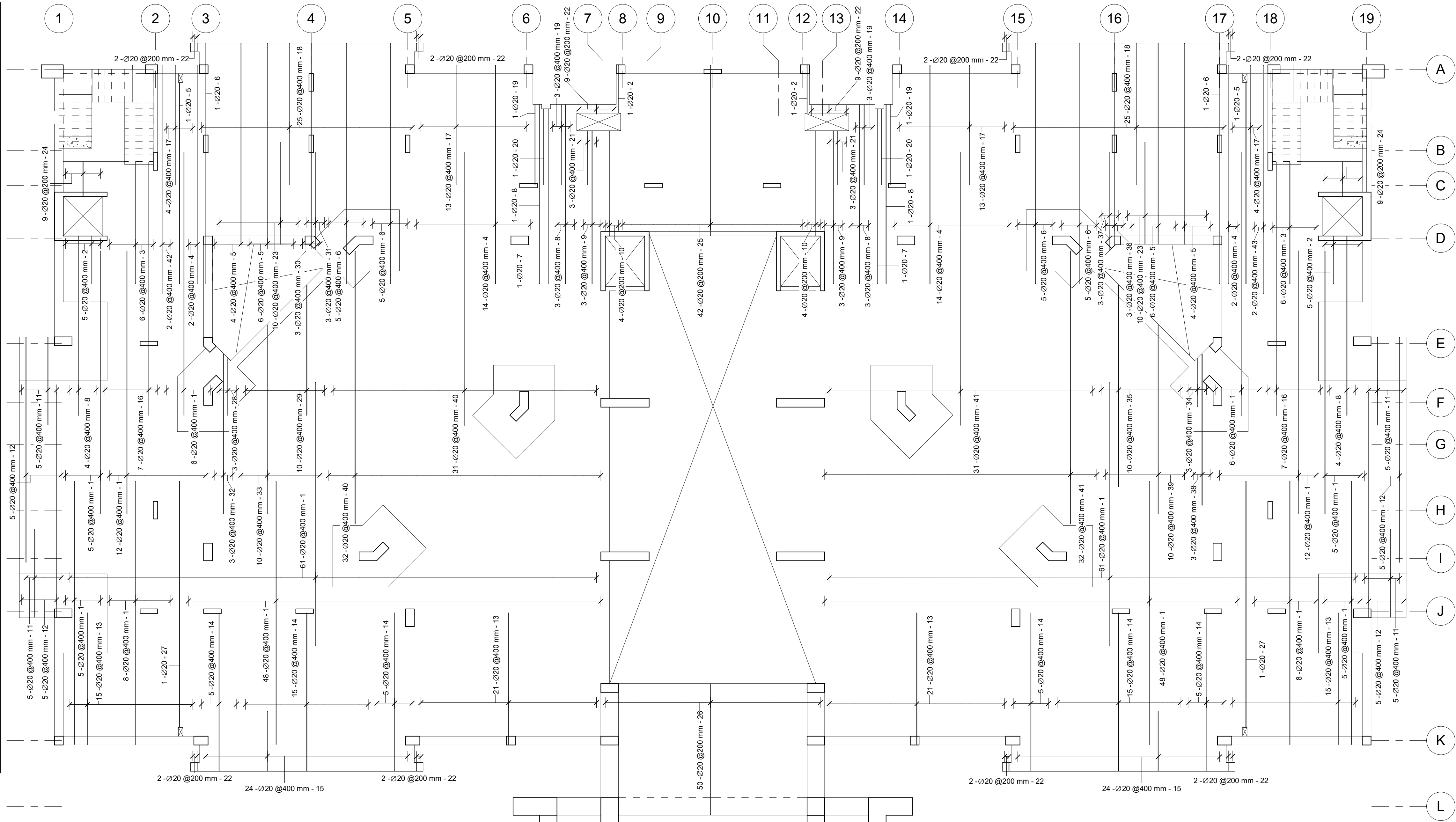
DATE: February 2021

DESIGNED: Refaat Elburki

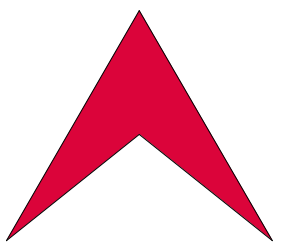
DRAWN: Awad Edrees



Third Floor Slab Main Bottom Reinforcement (Major Direction) Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	290	12000 mm	3480 m	12000 mm	8582
2	20 mm	12	2150 mm	26 m	2150 mm	64
3	20 mm	12	5550 mm	67 m	5550 mm	164
4	20 mm	32	9950 mm	318 m	9950 mm	785
5	20 mm	22	9150 mm	201 m	9150 mm	496
6	20 mm	22	10950 mm	241 m	10950 mm	594
7	20 mm	2	7950 mm	16 m	7950 mm	39
8	20 mm	16	8150 mm	130 m	8150 mm	322
9	20 mm	6	6950 mm	42 m	6950 mm	103
10	20 mm	8	4750 mm	38 m	4750 mm	94
11	20 mm	20	4000 mm	80 m	4000 mm	197
12	20 mm	20	10250 mm	205 m	10250 mm	506
13	20 mm	72	6000 mm	432 m	6000 mm	1065
14	20 mm	50	7200 mm	360 m	7200 mm	888
15	20 mm	48	2700 mm	130 m	2700 mm	320
16	20 mm	14	11550 mm	162 m	11550 mm	399
17	20 mm	34	5450 mm	185 m	5450 mm	457
18	20 mm	50	6450 mm	323 m	6450 mm	795
19	20 mm	8	3650 mm	29 m	3650 mm	72
20	20 mm	2	3450 mm	7 m	3450 mm	17
21	20 mm	6	2450 mm	15 m	2450 mm	36
22	20 mm	34	350 mm	12 m	350 mm	29
23	20 mm	20	4650 mm	93 m	4650 mm	229
24	20 mm	18	1550 mm	28 m	1550 mm	69
25	20 mm	42	7750 mm	326 m	7750 mm	803
26	20 mm	50	5950 mm	298 m	5950 mm	734
27	20 mm	2	11200 mm	22 m	11200 mm	55
28	20 mm	3	Variable	8 m	Variable	19
29	20 mm	10	Variable	49 m	Variable	121
30	20 mm	3	Variable	28 m	Variable	68
31	20 mm	3	Variable	13 m	Variable	33
32	20 mm	3	Variable	22 m	Variable	54
33	20 mm	10	Variable	92 m	Variable	227
34	20 mm	3	Variable	7 m	Variable	16
35	20 mm	10	Variable	72 m	Variable	177
36	20 mm	3	Variable	28 m	Variable	68
37	20 mm	3	Variable	13 m	Variable	33
38	20 mm	3	Variable	21 m	Variable	51
39	20 mm	10	Variable	92 m	Variable	227
40	20 mm	63	12460 mm	785 m	12460 mm	1936
41	20 mm	63	12450 mm	784 m	12450 mm	1934
42	20 mm	2	10410 mm	21 m	10410 mm	51
43	20 mm	2	10400 mm	21 m	10400 mm	51
		1106		9319 m		22982



1 Third Floor Slab Main Bottom Reinforcement (Major Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

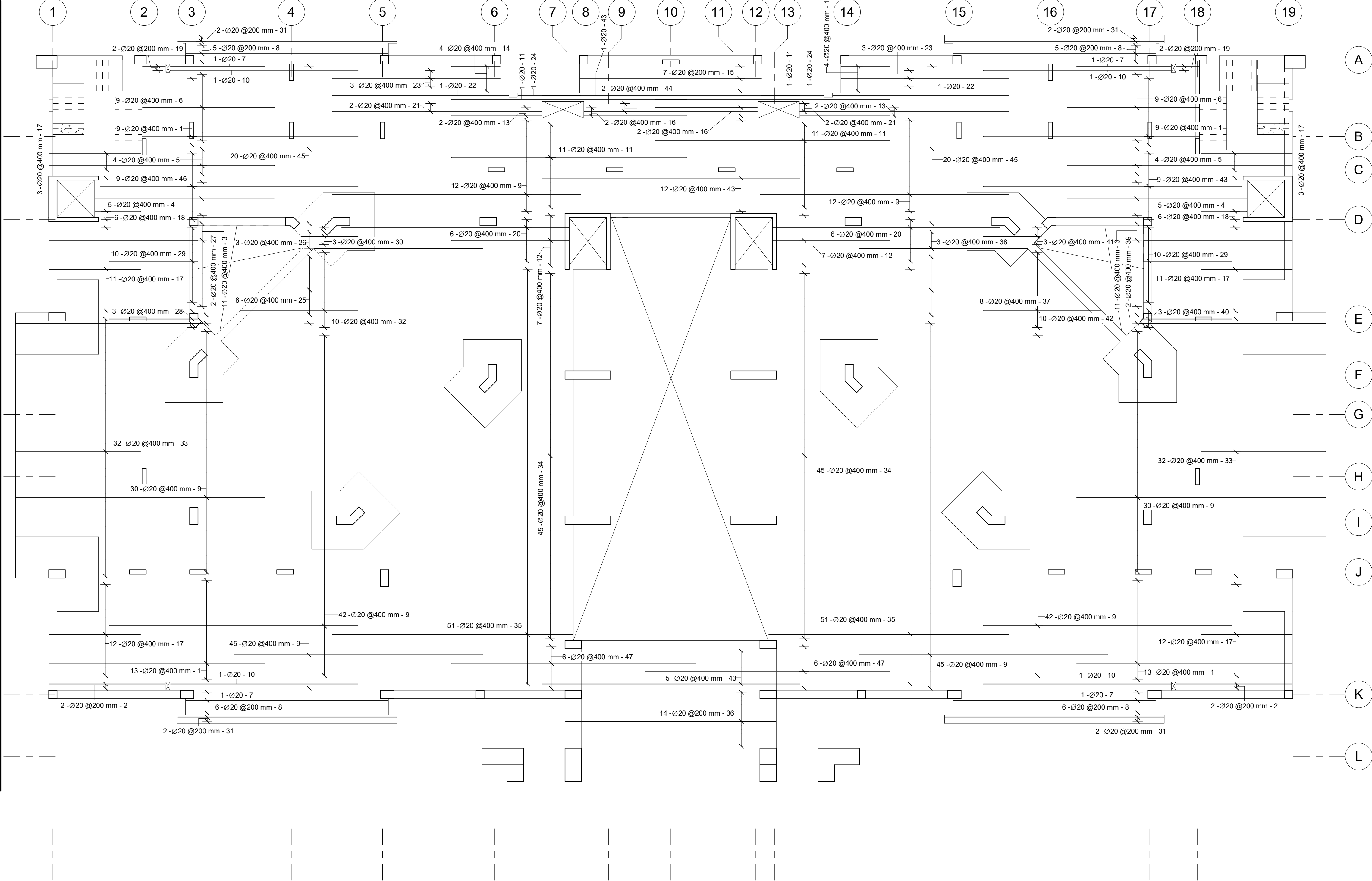
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية



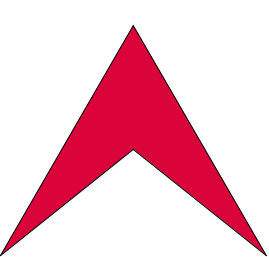
Rev.	AMENDMENT	DATE

Court of Benghazi North Benghazi Third Floor Slab Main Bottom Reinforcement (Major Direction)		ST-RT-84-00
SCALE:	1 : 100	DATE: February 2021
DESIGNED:	Refaat Elburki	
DRAWN:	Awad Edrees	

Third Floor Slab Main Bottom Reinforcement (Minor Direction) Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	44	10400 mm	458 m	10400 mm	1129	
2	20 mm	4	5600 mm	22 m	5600 mm	55	
3	20 mm	22	7150 mm	157 m	7150 mm	388	
4	20 mm	10	8650 mm	87 m	8650 mm	213	
5	20 mm	8	10850 mm	87 m	10850 mm	214	
6	20 mm	18	6350 mm	114 m	6350 mm	282	
7	20 mm	4	4550 mm	18 m	4550 mm	45	
8	20 mm	22	9750 mm	215 m	9750 mm	529	
9	20 mm	258	12000 mm	3096 m	12000 mm	7635	
10	20 mm	4	9050 mm	36 m	9050 mm	89	
11	20 mm	24	11350 mm	272 m	11350 mm	672	
12	20 mm	14	5650 mm	79 m	5650 mm	195	
13	20 mm	4	4350 mm	17 m	4350 mm	43	
14	20 mm	8	2350 mm	19 m	2350 mm	46	
15	20 mm	7	8750 mm	61 m	8750 mm	151	
16	20 mm	4	4950 mm	20 m	4950 mm	49	
17	20 mm	52	4400 mm	229 m	4400 mm	564	
18	20 mm	12	2200 mm	26 m	2200 mm	65	
19	20 mm	4	1100 mm	4 m	1100 mm	11	
20	20 mm	12	10950 mm	131 m	10950 mm	324	
21	20 mm	4	10100 mm	40 m	10100 mm	100	
22	20 mm	2	8500 mm	17 m	8500 mm	42	
23	20 mm	6	8100 mm	49 m	8100 mm	120	
24	20 mm	2	3000 mm	6 m	3000 mm	15	
25	20 mm	8	Variable	84 m	Variable	206	
26	20 mm	3	Variable	26 m	Variable	63	
27	20 mm	2	Variable	18 m	Variable	43	
28	20 mm	3	Variable	13 m	Variable	32	
29	20 mm	20	4250 mm	85 m	4250 mm	210	
30	20 mm	3	Variable	8 m	Variable	20	
31	20 mm	8	10550 mm	84 m	10550 mm	208	
32	20 mm	10	Variable	47 m	Variable	115	
33	20 mm	64	6000 mm	384 m	6000 mm	947	
34	20 mm	90	5850 mm	527 m	5850 mm	1298	
35	20 mm	102	11600 mm	1183 m	11600 mm	2918	
36	20 mm	14	10150 mm	142 m	10150 mm	350	
37	20 mm	8	Variable	84 m	Variable	206	
38	20 mm	3	Variable	26 m	Variable	63	
39	20 mm	2	Variable	18 m	Variable	43	
40	20 mm	3	Variable	13 m	Variable	32	
41	20 mm	3	Variable	8 m	Variable	20	
42	20 mm	10	Variable	47 m	Variable	115	
43	20 mm	27	12450 mm	336 m	12450 mm	829	
44	20 mm	2	8350 mm	17 m	8350 mm	41	
45	20 mm	40	11550 mm	462 m	11550 mm	1139	
46	20 mm	9	12460 mm	112 m	12460 mm	277	
47	20 mm	12	11800 mm	142 m	11800 mm	349	
		995		9125 m		22503	



1 Third Floor Slab Main Bottom Reinforcement (Minor Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi

Third Floor Slab Main Bottom Reinforcement (Minor Direction)

ST-RT-85-00

SCALE: 1 : 100

DATE: February 2021

DESIGNED: Refaat Elburki

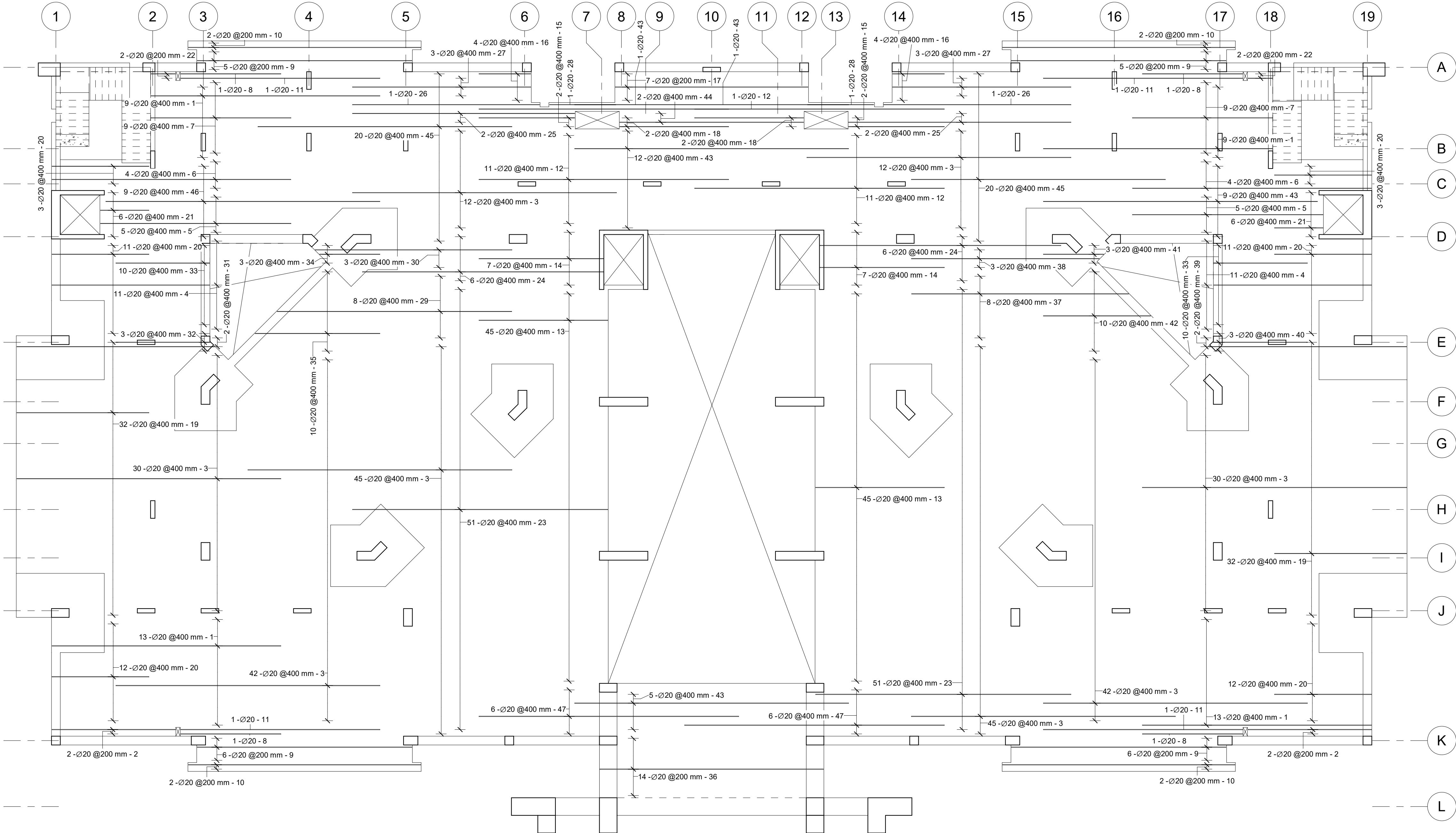
DRAWN: Awad Edrees

Structural drawing of a reinforced concrete slab showing a grid of reinforcement bars. The drawing includes a coordinate grid with numbers 1-19 and letters A-L. Reinforcement bars are labeled with their diameter, spacing, and length, such as "2-Ø20 @200 mm - 24" and "15-Ø20 @400 mm - 15". The drawing also shows the layout of columns and beams, with some areas marked with "X" indicating reinforcement details.

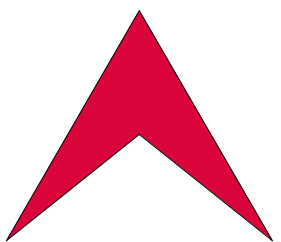
1 Third Floor Slab Main Top Reinforcement (Major Direction)
1 : 100



Third Floor Slab Main Top Reinforcement (Minor Direction) Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	44	10400 mm	458 m	10400 mm	1129
2	20 mm	4	5600 mm	22 m	5600 mm	55
3	20 mm	258	12000 mm	3096 m	12000 mm	7635
4	20 mm	22	7150 mm	157 m	7150 mm	388
5	20 mm	10	8650 mm	87 m	8650 mm	213
6	20 mm	8	10850 mm	87 m	10850 mm	214
7	20 mm	18	6350 mm	114 m	6350 mm	282
8	20 mm	4	4550 mm	18 m	4550 mm	45
9	20 mm	22	9750 mm	215 m	9750 mm	529
10	20 mm	8	10550 mm	84 m	10550 mm	208
11	20 mm	4	9050 mm	36 m	9050 mm	89
12	20 mm	24	11350 mm	272 m	11350 mm	672
13	20 mm	90	5850 mm	527 m	5850 mm	1298
14	20 mm	14	5650 mm	79 m	5650 mm	195
15	20 mm	4	4350 mm	17 m	4350 mm	43
16	20 mm	8	2350 mm	19 m	2350 mm	46
17	20 mm	7	8750 mm	61 m	8750 mm	151
18	20 mm	4	4950 mm	20 m	4950 mm	49
19	20 mm	64	6000 mm	384 m	6000 mm	947
20	20 mm	52	4400 mm	229 m	4400 mm	564
21	20 mm	12	2200 mm	26 m	2200 mm	65
22	20 mm	4	1100 mm	4 m	1100 mm	11
23	20 mm	102	11600 mm	1183 m	11600 mm	2918
24	20 mm	12	10950 mm	131 m	10950 mm	324
25	20 mm	4	10100 mm	40 m	10100 mm	100
26	20 mm	2	8500 mm	17 m	8500 mm	42
27	20 mm	6	8100 mm	49 m	8100 mm	120
28	20 mm	2	3000 mm	6 m	3000 mm	15
29	20 mm	8	Variable	84 m	Variable	206
30	20 mm	3	Variable	26 m	Variable	63
31	20 mm	2	Variable	18 m	Variable	43
32	20 mm	3	Variable	13 m	Variable	32
33	20 mm	20	4250 mm	85 m	4250 mm	210
34	20 mm	3	Variable	8 m	Variable	20
35	20 mm	10	Variable	47 m	Variable	115
36	20 mm	14	10150 mm	142 m	10150 mm	350
37	20 mm	8	Variable	84 m	Variable	206
38	20 mm	3	Variable	26 m	Variable	63
39	20 mm	2	Variable	18 m	Variable	43
40	20 mm	3	Variable	13 m	Variable	32
41	20 mm	3	Variable	8 m	Variable	20
42	20 mm	10	Variable	47 m	Variable	115
43	20 mm	27	12450 mm	336 m	12450 mm	829
44	20 mm	2	8350 mm	17 m	8350 mm	41
45	20 mm	40	11550 mm	462 m	11550 mm	1139
46	20 mm	9	12460 mm	112 m	12460 mm	277
47	20 mm	12	11800 mm	142 m	11800 mm	349
		995		9125 m		22503



1 Third Floor Slab Main Top Reinforcement (Minor Direction)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



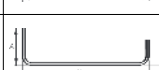
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

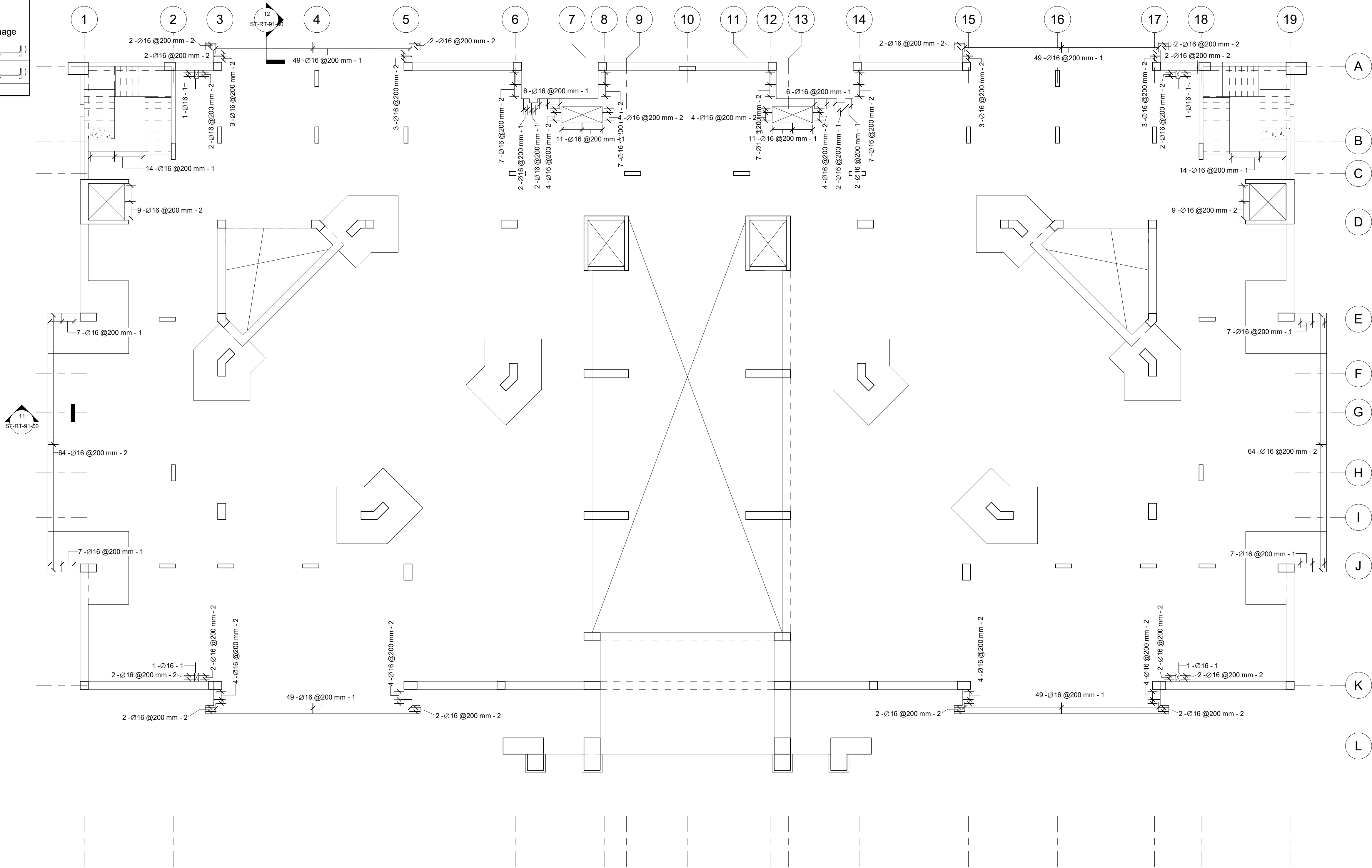
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Third Floor Slab Main Top Reinforcement (Minor Direction)
SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

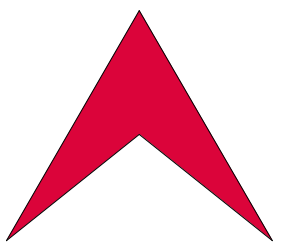
DATE: February 2021

ST-RT-87-00

Third Floor Slab Side Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Image
1	16 mm	298	1130 mm	337 m	500 mm	200 mm	500 mm	531	
2	16 mm	250	1090 mm	273 m	500 mm	160 mm	500 mm	430	
		548	609 m		962				



1 Third Floor Slab Side Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة



ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

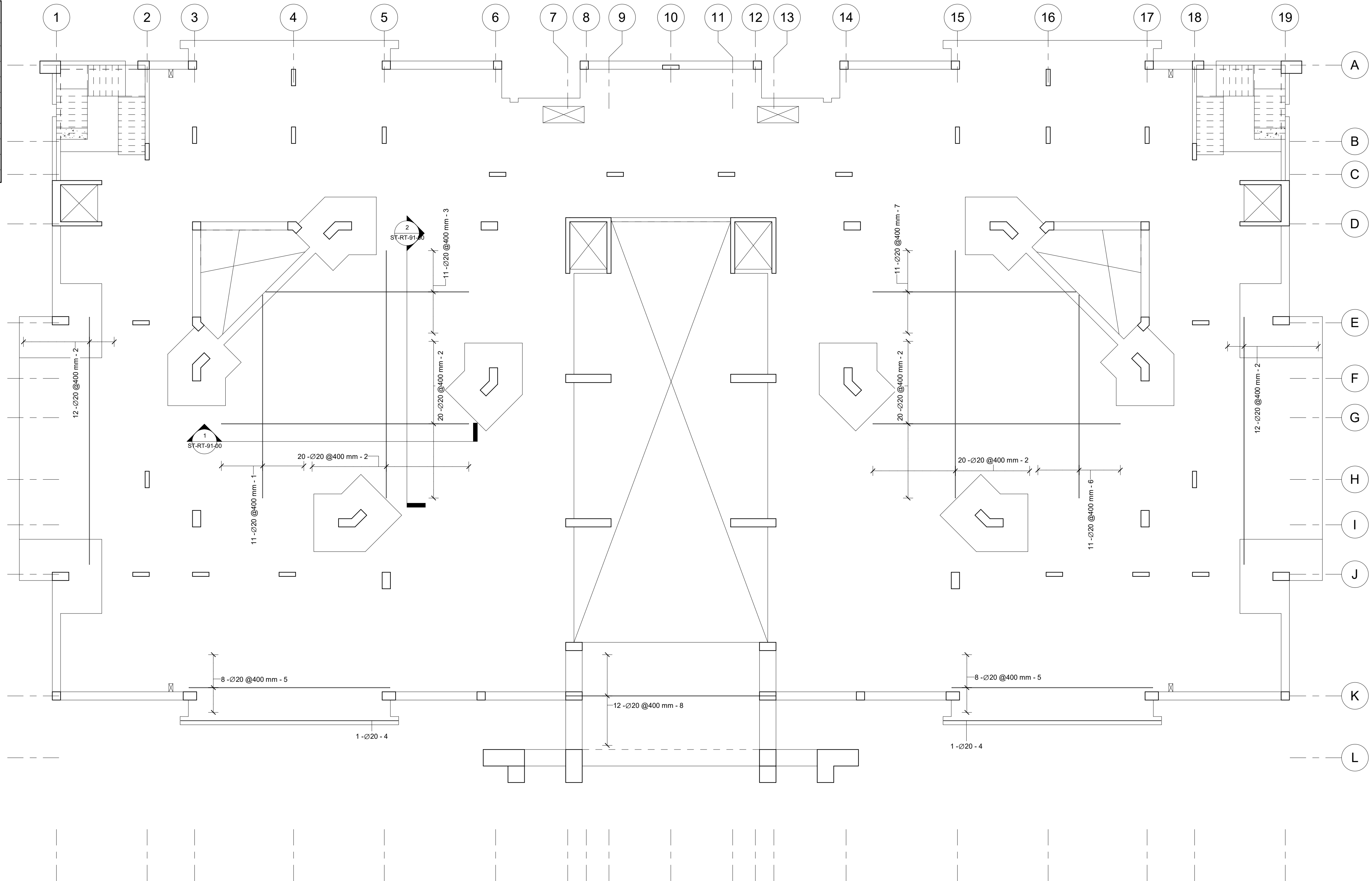
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Third Floor Slab Side Reinforcement

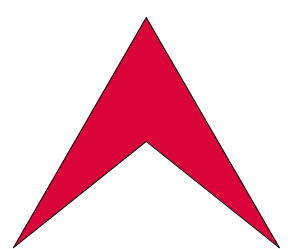
ST-RT-88-00

SCALE: 1 : 100	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	

Third Floor Slab Additional Bottom Reinforcement Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	20 mm	11	12000 mm	108 m	12000 mm	267
2	20 mm	104	Variable	1248 m	Variable	3078
3	20 mm	11	10550 mm	21 m	10550 mm	52
4	20 mm	2	9750 mm	156 m	9750 mm	385
5	20 mm	16	Variable	108 m	Variable	267
6	20 mm	11	Variable	108 m	Variable	267
7	20 mm	11	Variable	108 m	Variable	267
8	20 mm	12	10150 mm	122 m	10150 mm	300
		178		1980 m		4883



1 Third Floor Slab Additional Bottom Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Third Floor Slab Additional Bottom Reinforcement

ST-RT-89-00

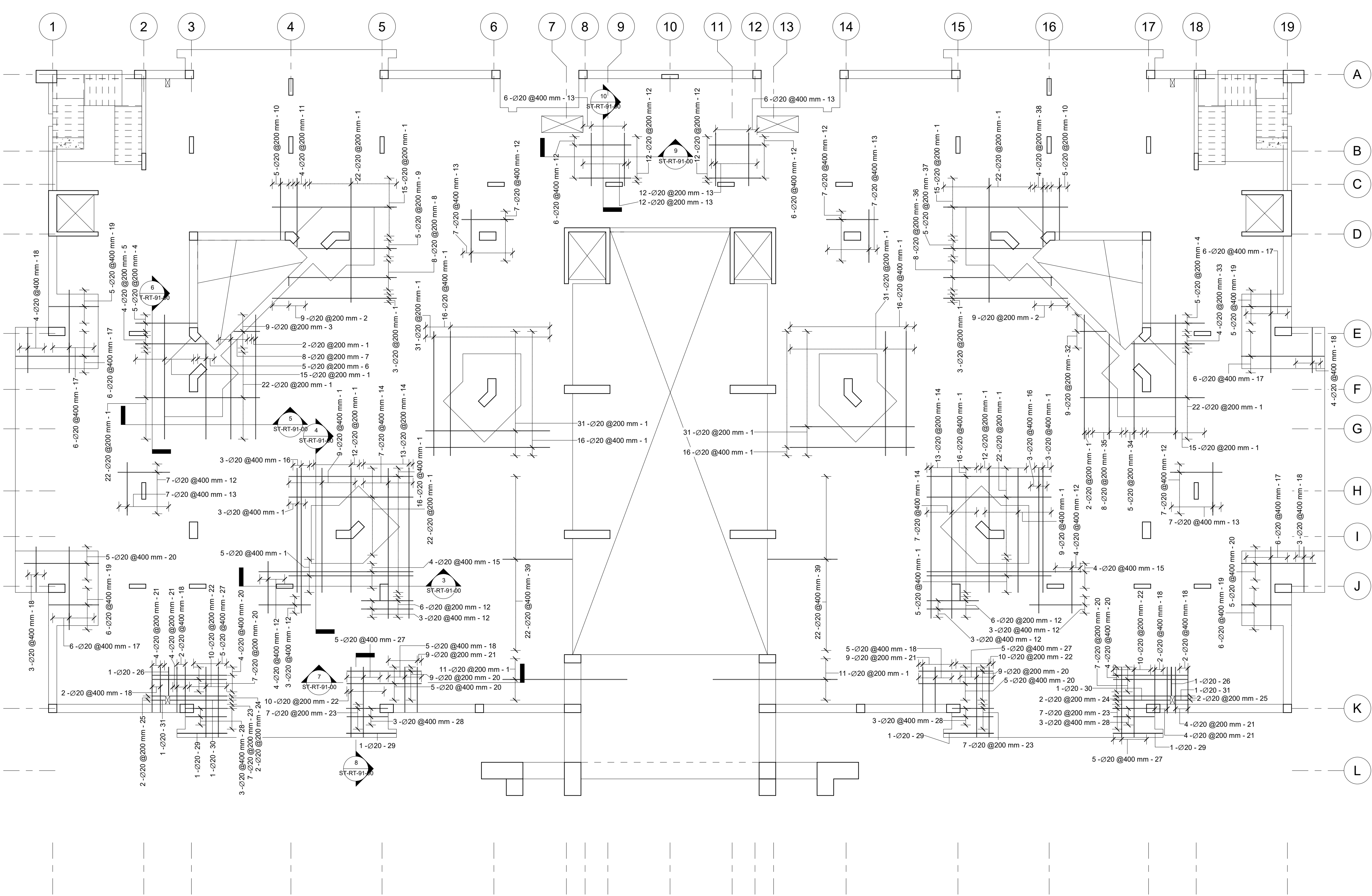
SCALE: 1 : 100

DATE: February 2021

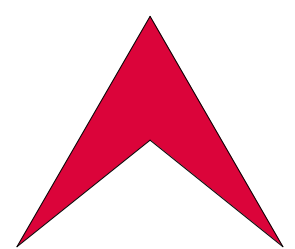
DESIGNED: Refaat Elburki

DRAWN: Awad Edrees

Third Floor Slab Additional Top Reinforcement Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	20 mm	502	6000 mm	3012 m	6000 mm	7428	
2	20 mm	18	450 mm	8 m	450 mm	20	
3	20 mm	9	Variable	11 m	Variable	28	
4	20 mm	10	2980 mm	30 m	2980 mm	73	
5	20 mm	4	Variable	14 m	Variable	34	
6	20 mm	5	Variable	24 m	Variable	58	
7	20 mm	8	Variable	41 m	Variable	102	
8	20 mm	8	Variable	41 m	Variable	102	
9	20 mm	5	Variable	24 m	Variable	58	
10	20 mm	10	2970 mm	30 m	2970 mm	73	
11	20 mm	4	Variable	14 m	Variable	34	
12	20 mm	96	2500 mm	240 m	2500 mm	592	
13	20 mm	64	2550 mm	163 m	2550 mm	402	
14	20 mm	40	7250 mm	290 m	7250 mm	715	
15	20 mm	8	7450 mm	60 m	7450 mm	147	
16	20 mm	6	7000 mm	42 m	7000 mm	104	
17	20 mm	36	4000 mm	144 m	4000 mm	355	
18	20 mm	32	2180 mm	70 m	2180 mm	172	
19	20 mm	26	2400 mm	62 m	2400 mm	154	
20	20 mm	60	3600 mm	216 m	3600 mm	533	
21	20 mm	34	2170 mm	74 m	2170 mm	182	
22	20 mm	40	3370 mm	135 m	3370 mm	332	
23	20 mm	28	2000 mm	56 m	2000 mm	138	
24	20 mm	4	2720 mm	11 m	2720 mm	27	
25	20 mm	4	630 mm	3 m	630 mm	6	
26	20 mm	4	1380 mm	6 m	1380 mm	14	
27	20 mm	20	3380 mm	68 m	3380 mm	167	
28	20 mm	12	1980 mm	24 m	1980 mm	59	
29	20 mm	4	2380 mm	10 m	2380 mm	23	
30	20 mm	2	2730 mm	5 m	2730 mm	13	
31	20 mm	2	620 mm	1 m	620 mm	3	
32	20 mm	9	Variable	11 m	Variable	28	
33	20 mm	4	Variable	14 m	Variable	34	
34	20 mm	5	Variable	24 m	Variable	58	
35	20 mm	8	Variable	41 m	Variable	102	
36	20 mm	8	Variable	41 m	Variable	102	
37	20 mm	5	Variable	24 m	Variable	58	
38	20 mm	4	Variable	14 m	Variable	34	
39	20 mm	44	3350 mm	147 m	3350 mm	364	
1192		5241 m		12925			



1 Third Floor Slab Additional Top Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

AL-baraka البركة
Jamal Abdalnasser st. شارع جمال عبد الناصر
Noaman Tower برج النعمان
Benghazi-Libya بنغازي-ليبيا
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية



Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Third Floor Slab Additional Top Reinforcement

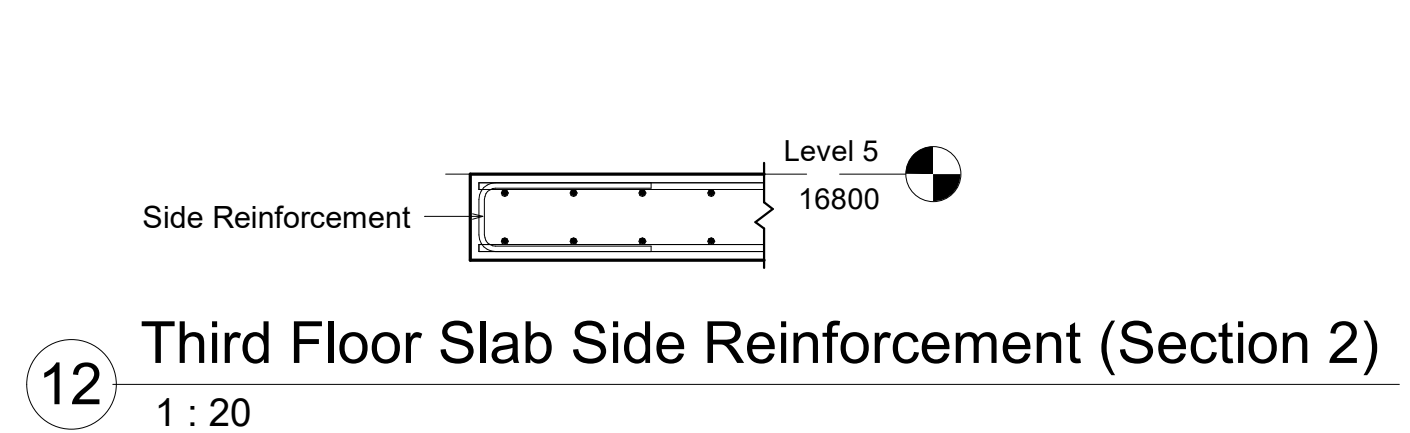
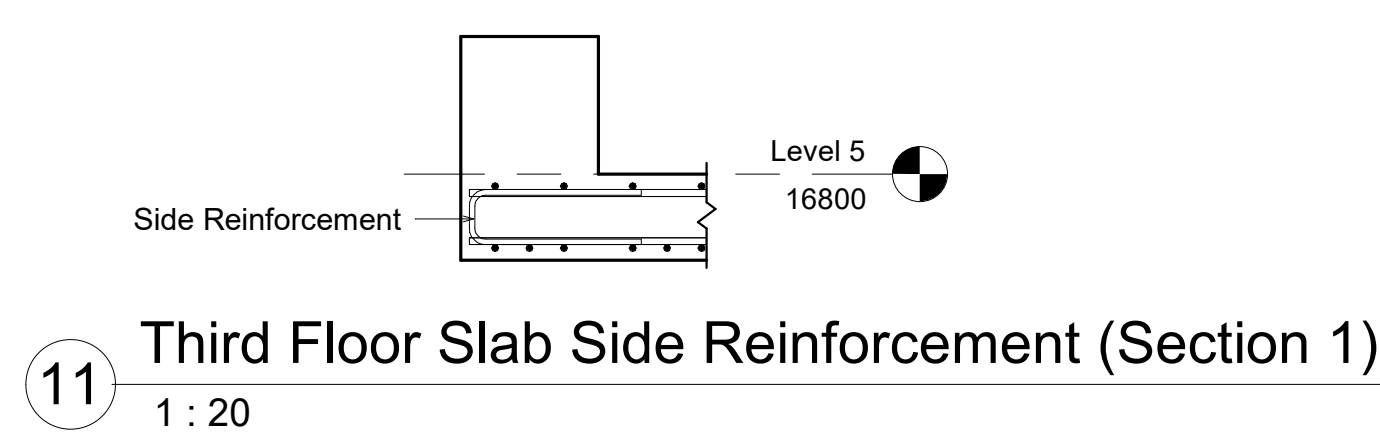
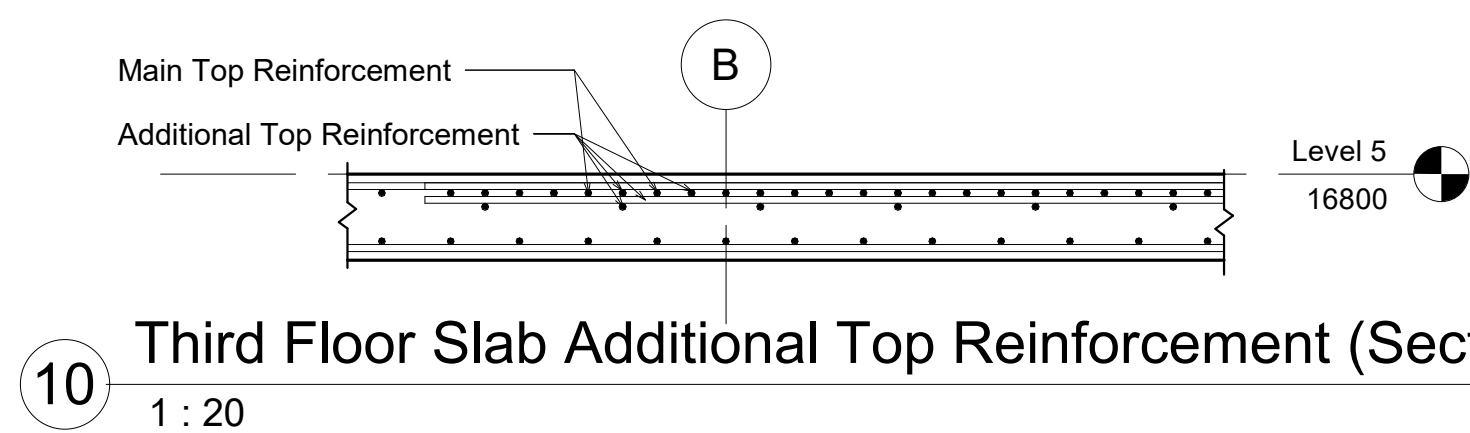
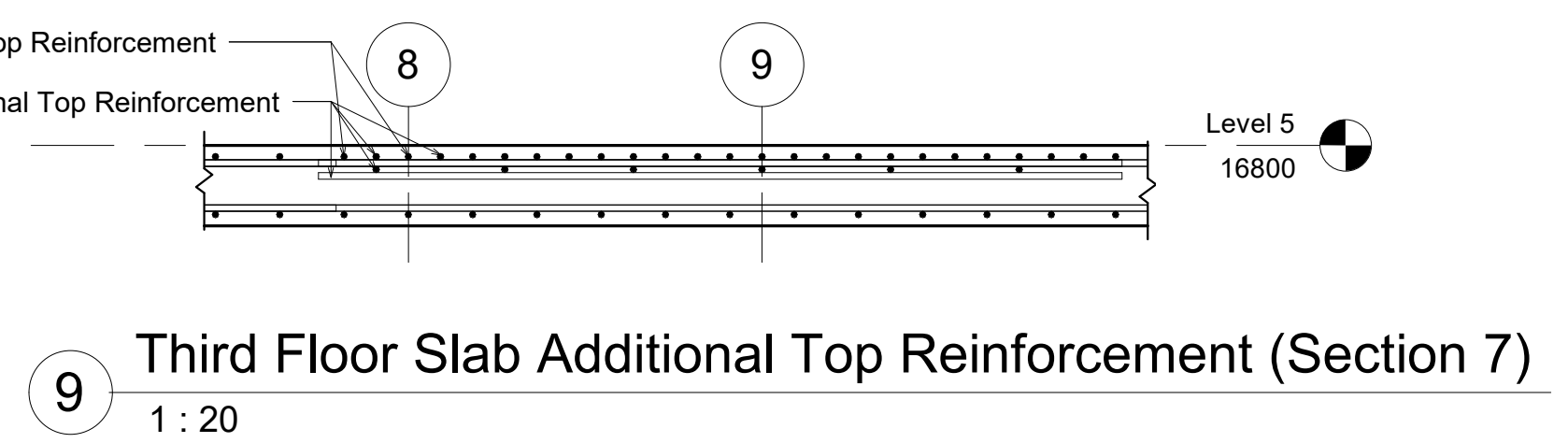
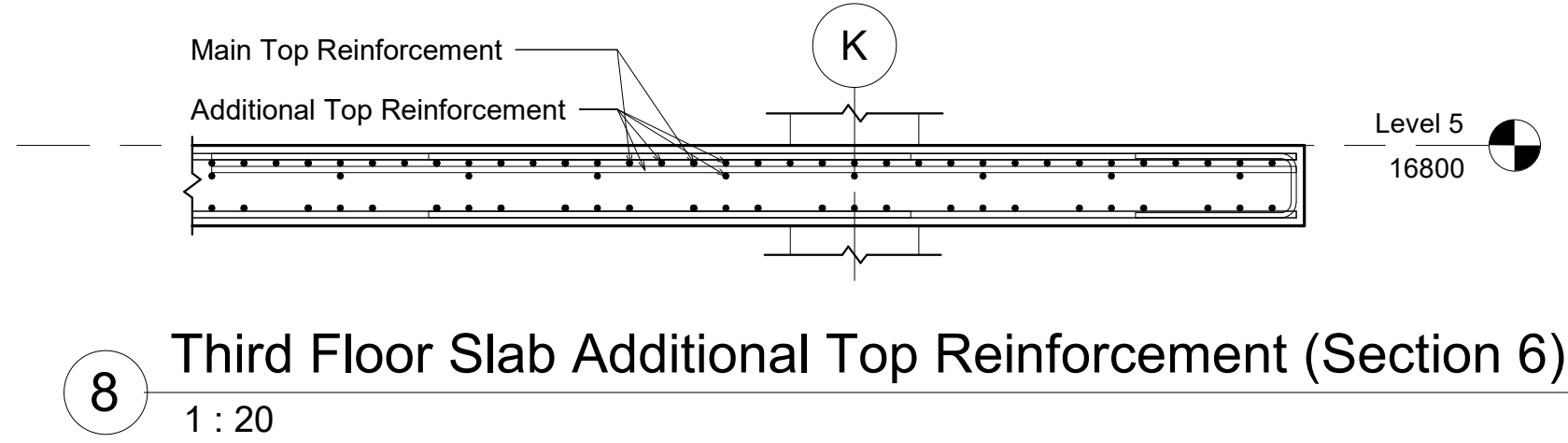
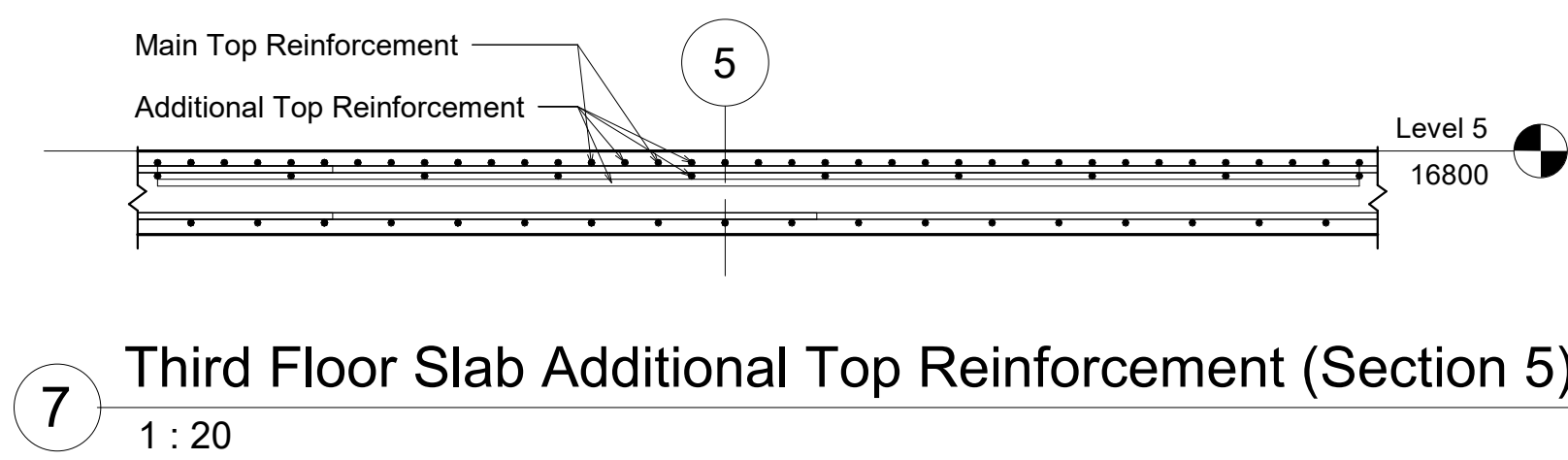
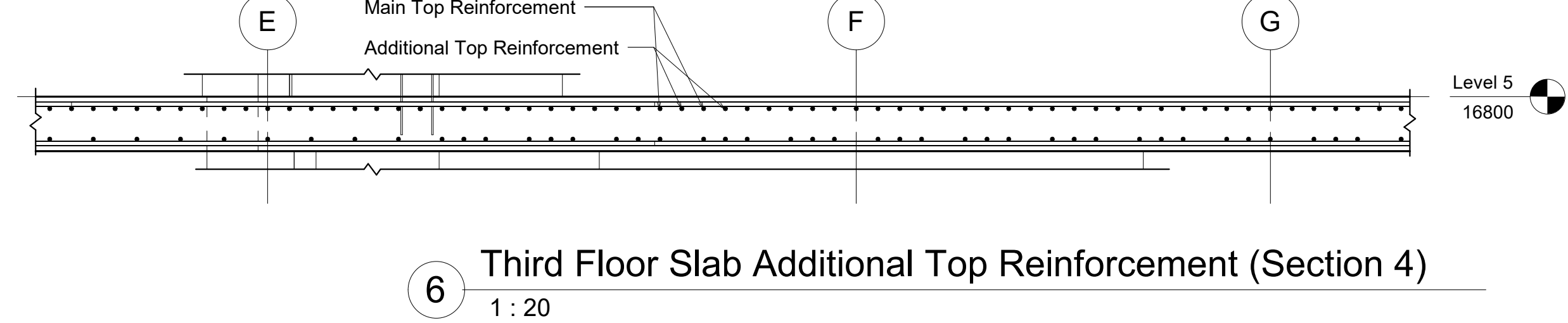
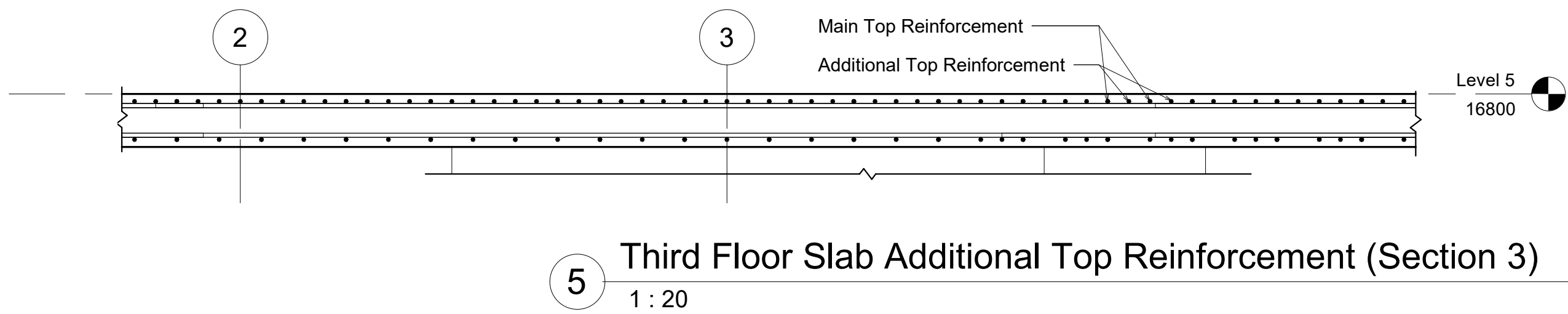
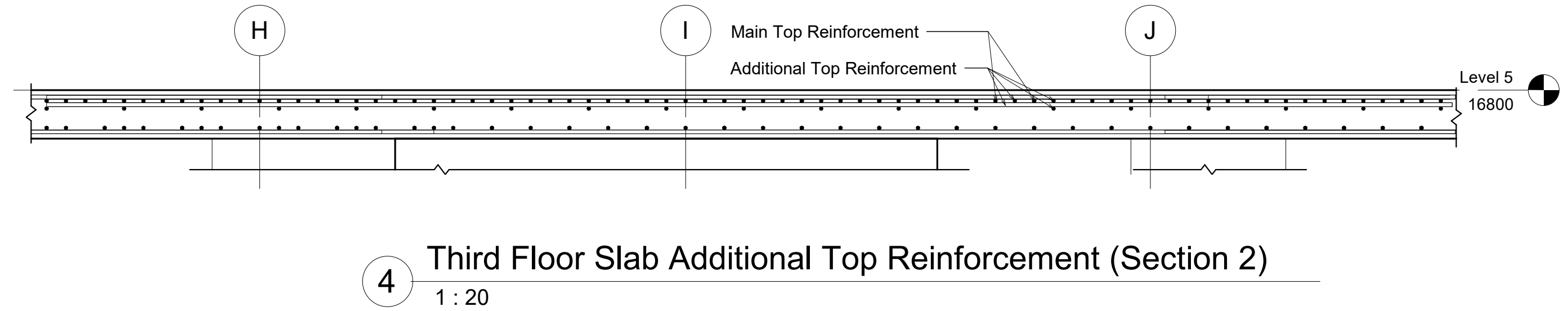
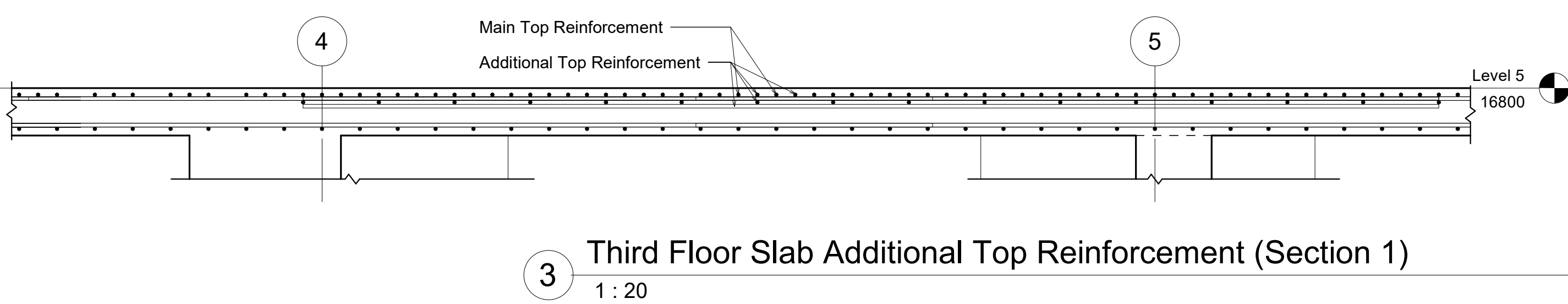
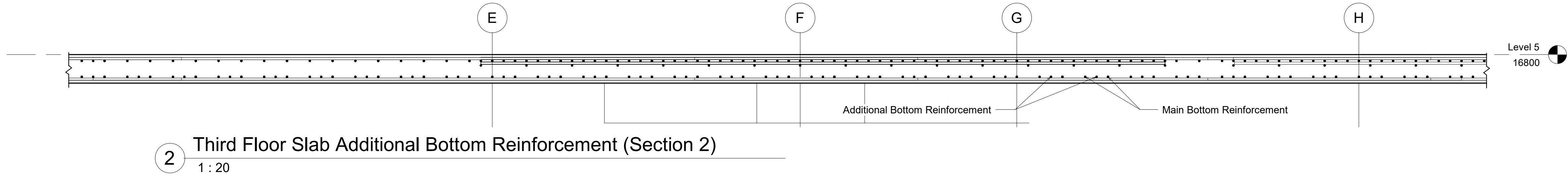
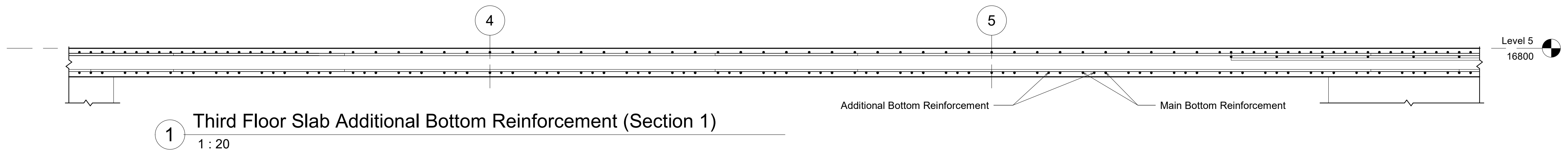
ST-RT-90-00

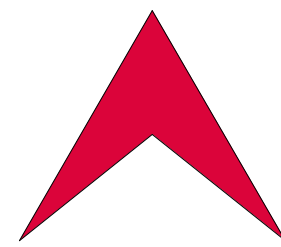
SCALE: 1 : 100

DATE: February 2021

DESIGNED: Refaat Elburki

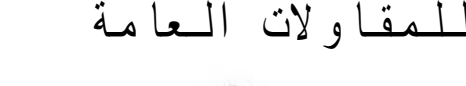
DRAWN: Awad Edrees



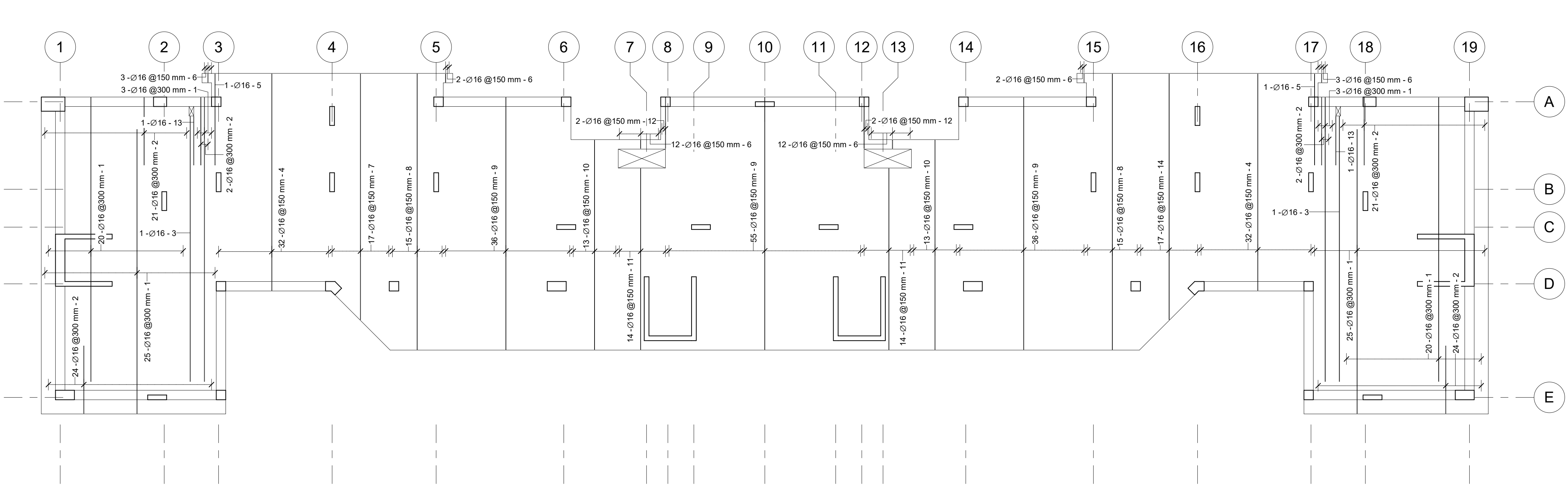
	L Libyan C Center E For Engineering C Consultancy Certified From Autodesk	البركة شارع جمال عبد الناصر Noaman Tower Benghazi-Libya LCEC@mail.com Mobile +218 92 512 3567 Mobile +218 91 857 1229		Rev.	AMENDMENT	DATE	Court of Benghazi North	
							Benghazi	
							Third Floor Slab Reinforcement Details	
							SCALE: 1 : 20	DATE: February 2021
							DESIGNED: Refaat Elburki	
							DRAWN: Awad Edrees	

ST-RT-91-00

[illegible]

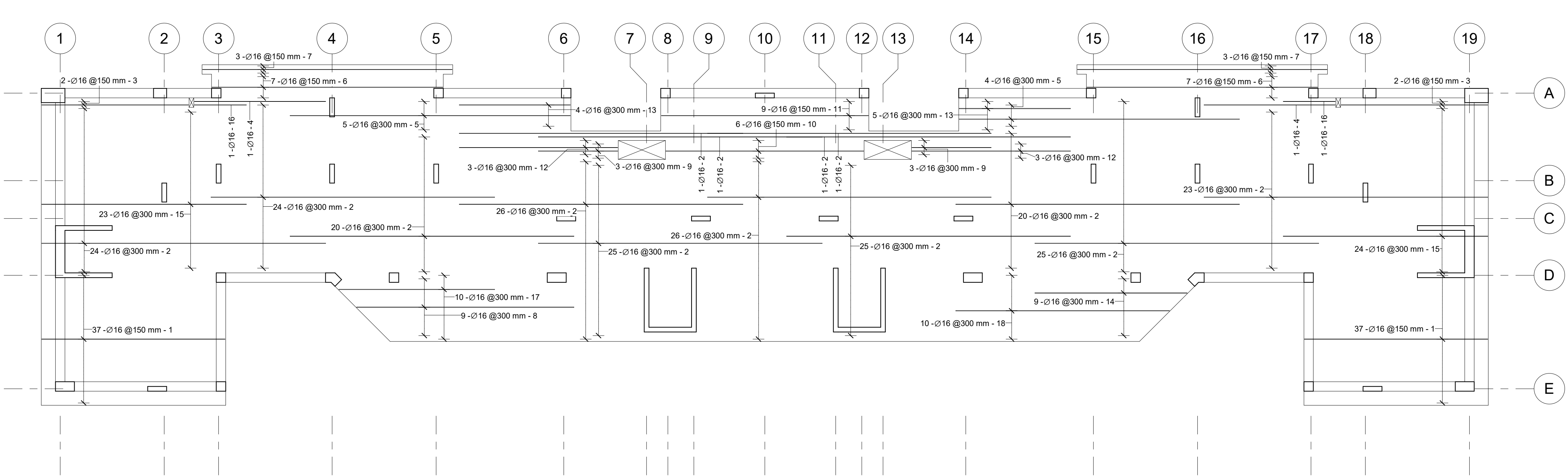
	Libyan Center For Engineering Consultancy Certified From Autodesk	AL-baraka Jamal Abdunnasser st. شارع جمال عبد الناصر Noaman Tower برج النعمان Benghazi-Libya بنغازي-ليبيا LCEC@mail.com Mobile +218 92 512 3567 Mobile +218 91 857 1229		شركة اهل الثقة للمقاولات العامة ليبيا - بنغازي الفويحات الغربية شارع العامرية	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">Rev.</th> <th style="width: 50%;">AMENDMENT</th> <th style="width: 40%;">DATE</th> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>	Rev.	AMENDMENT	DATE																			Court of Benghazi North Benghazi Roof Slab SR1 Main Bottom Reinforcement	ST-RT-92-00
	Rev.	AMENDMENT	DATE																									
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">SCALE: 1 : 100</td> <td style="width: 50%;">DATE: February 2021</td> </tr> </table>	SCALE: 1 : 100	DATE: February 2021																					
SCALE: 1 : 100	DATE: February 2021																											
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DESIGNED: Refaat Elburki</td> <td style="width: 50%;"></td> </tr> </table>	DESIGNED: Refaat Elburki																						
DESIGNED: Refaat Elburki																												
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">DRAWN: Awad Edrees</td> <td style="width: 50%;"></td> </tr> </table>	DRAWN: Awad Edrees																						
DRAWN: Awad Edrees																												

Roof Slab SR1 Main Top Reinforcement (Major Direction) Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	16 mm	96	12000 mm	1152 m	12000 mm	1818
2	16 mm	94	2850 mm	268 m	2850 mm	423
3	16 mm	2	11200 mm	22 m	11200 mm	35
4	16 mm	64	9150 mm	586 m	9150 mm	924
5	16 mm	2	3850 mm	8 m	3850 mm	12
6	16 mm	34	350 mm	12 m	350 mm	19
7	16 mm	17	Variable	177 m	Variable	279
8	16 mm	30	11650 mm	350 m	11650 mm	552
9	16 mm	127	10650 mm	1353 m	10650 mm	2135
10	16 mm	26	8850 mm	230 m	8850 mm	363
11	16 mm	28	7650 mm	214 m	7650 mm	338
12	16 mm	4	2150 mm	9 m	2150 mm	14
13	16 mm	2	2050 mm	4 m	2050 mm	6
14	16 mm	17	Variable	177 m	Variable	279
		543		4560 m		7197

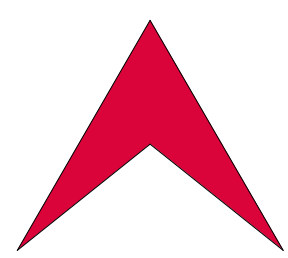


1 Roof Slab SR1 Main Top Reinforcement (Major Direction)
1 : 100

Roof Slab SR1 Main Top Reinforcement (Minor Direction) Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	16 mm	74	7750 mm	574 m	7750 mm	905
2	16 mm	242	12000 mm	2904 m	12000 mm	4583
3	16 mm	4	6200 mm	25 m	6200 mm	39
4	16 mm	2	5550 mm	11 m	5550 mm	18
5	16 mm	9	11850 mm	107 m	11850 mm	168
6	16 mm	14	9750 mm	137 m	9750 mm	215
7	16 mm	6	10550 mm	63 m	10550 mm	100
8	16 mm	9	Variable	83 m	Variable	130
9	16 mm	6	3350 mm	20 m	3350 mm	32
10	16 mm	6	8350 mm	50 m	8350 mm	79
11	16 mm	9	8750 mm	79 m	8750 mm	124
12	16 mm	6	6700 mm	40 m	6700 mm	63
13	16 mm	9	4700 mm	42 m	4700 mm	67
14	16 mm	9	Variable	53 m	Variable	83
15	16 mm	47	8650 mm	407 m	8650 mm	642
16	16 mm	2	2200 mm	4 m	2200 mm	7
17	16 mm	10	Variable	58 m	Variable	92
18	16 mm	10	Variable	92 m	Variable	145
		474		4748 m		7493



2 Roof Slab SR1 Main Top Reinforcement (Minor Direction)
1 : 100



L Libyan

C Center

E For Engineering

C Consultancy

Certified From Autodesk

AL-baraka البركة

Jamal Abdalnasser st. شارع جمال عبد الناصر

Noaman Tower برج النعمان

Benghazi-Libya بنغازي-ليبيا

LCEC@mail.com

Mobile +218 92 512 3567

Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة

ليبيا - بنغازي

الفويهاة الغربية

شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North

Benghazi

Roof Slab SR1 Main Top Reinforcement

ST-RT-93-00

SCALE: 1 : 100

DESIGNED: Refaat Elburki

DRAWN: Awad Edrees

DATE: February 2021

Figure 10.10 shows the reinforcement details for a 21000mm long wall. The diagram illustrates the main top reinforcement and additional top reinforcement. The wall is shown with a break symbol on the left and a corner detail on the right. The level is indicated as Level 6.

Roof Slab SR1 Side Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Image
1	16 mm	529	1100 mm	582 m	500 mm	170 mm	500 mm	918	
2	16 mm	302	1070 mm	323 m	500 mm	140 mm	500 mm	510	
		831	905 m					1428	

5 Roof Slab SR1 Side Reinforcement (S)

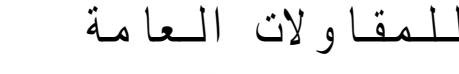
1 : 20

Level 6
21000
Side Reinforcement

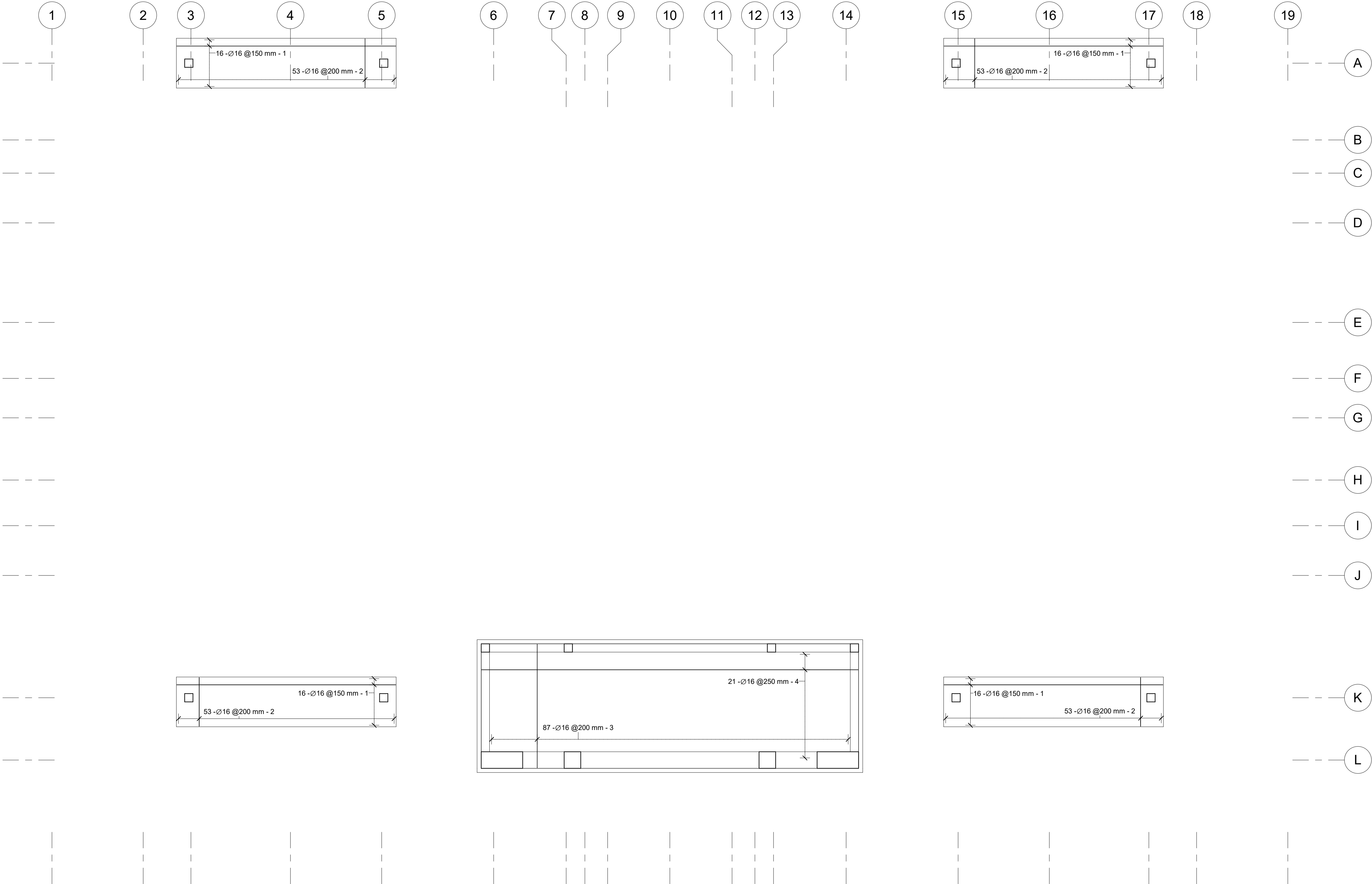
1

Side Reinforcement

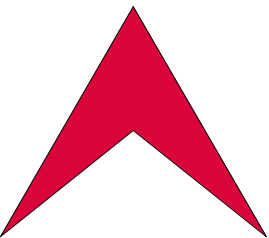
Level 6
21000

	Libyan Center For Engineering Consultancy Certified From Autodesk	AL-baraka Jamal Abdunnasser st. Noaman Tower Benghazi-Libya LCEC@mail.com Mobile +218 92 512 3567 Mobile +218 91 857 1229		البركة شارع جمال عبد الناصر برج النعمان بنغازي-ليبيا	شركة اهل الثقة للمقاولات العامة ليبيا - بنغازي الفويحات الغربية شارع العامرية		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Rev.</th> <th style="width: 40%;">AMENDMENT</th> <th style="width: 50%;">DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Rev.	AMENDMENT	DATE																			Court of Benghazi North Benghazi Roof Slab SR1 Additional Top & Side Reinforcement <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">SCALE: As indicated</td> <td style="width: 40%;">DATE: February 2021</td> </tr> <tr> <td>DESIGNED: Refaat Elburki</td> <td rowspan="2"></td> </tr> <tr> <td>DRAWN: Awad Edrees</td> </tr> </table>	SCALE: As indicated	DATE: February 2021	DESIGNED: Refaat Elburki		DRAWN: Awad Edrees
Rev.	AMENDMENT	DATE																																
SCALE: As indicated	DATE: February 2021																																	
DESIGNED: Refaat Elburki																																		
DRAWN: Awad Edrees																																		

Roof Slabs SR2 to SR4 Main Bottom Rebar Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	16 mm	64	10550 mm	675 m	10550 mm	1066	
2	16 mm	212	2350 mm	498 m	2350 mm	786	
3	16 mm	87	5950 mm	518 m	5950 mm	817	
4	16 mm	21	18150 mm	381 m	18150 mm	602	
		384		2072 m		3271	



1 Roof Slabs SR2 to SR4 Main Bottom Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

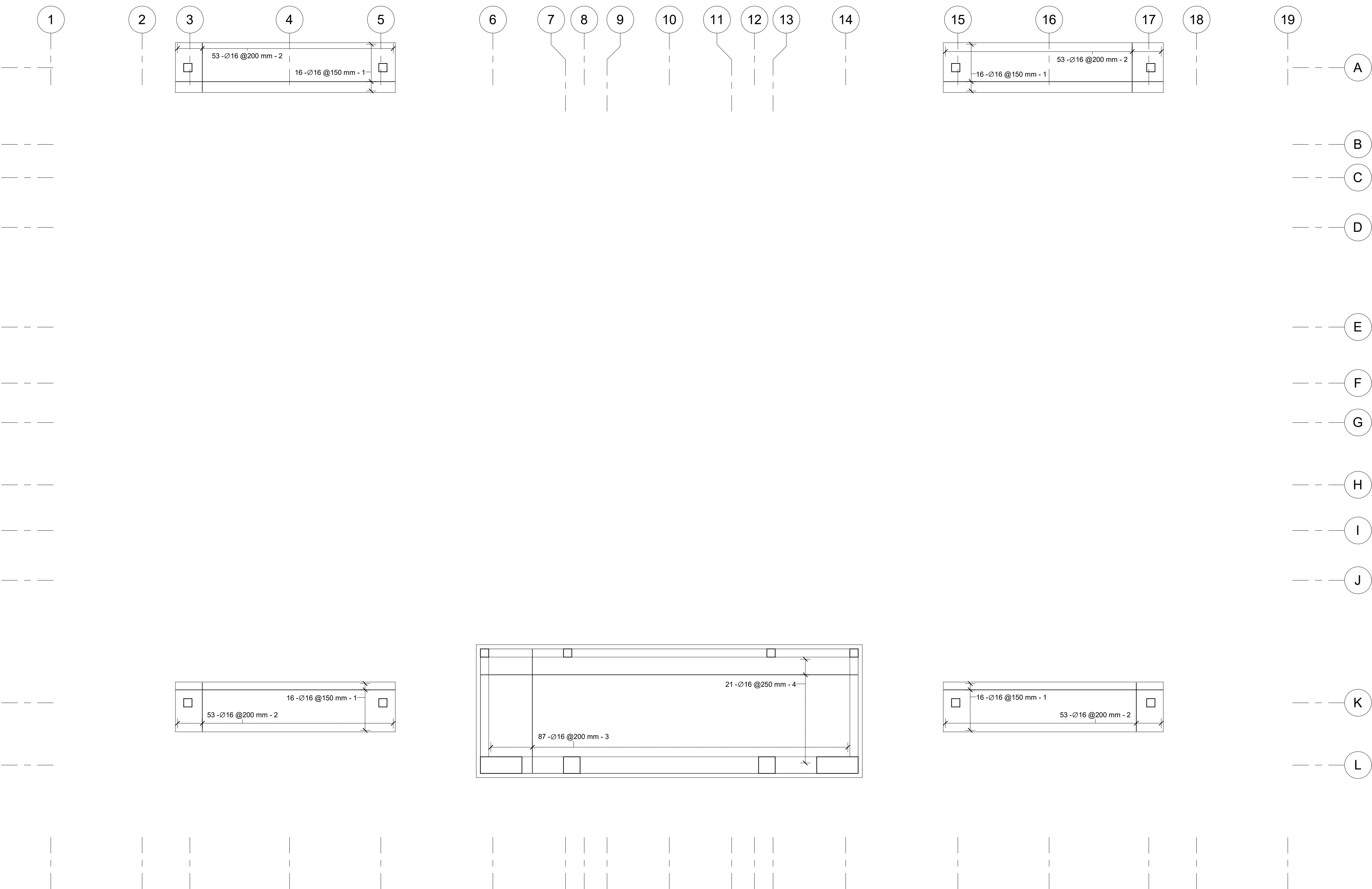
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية



Rev.	AMENDMENT	DATE

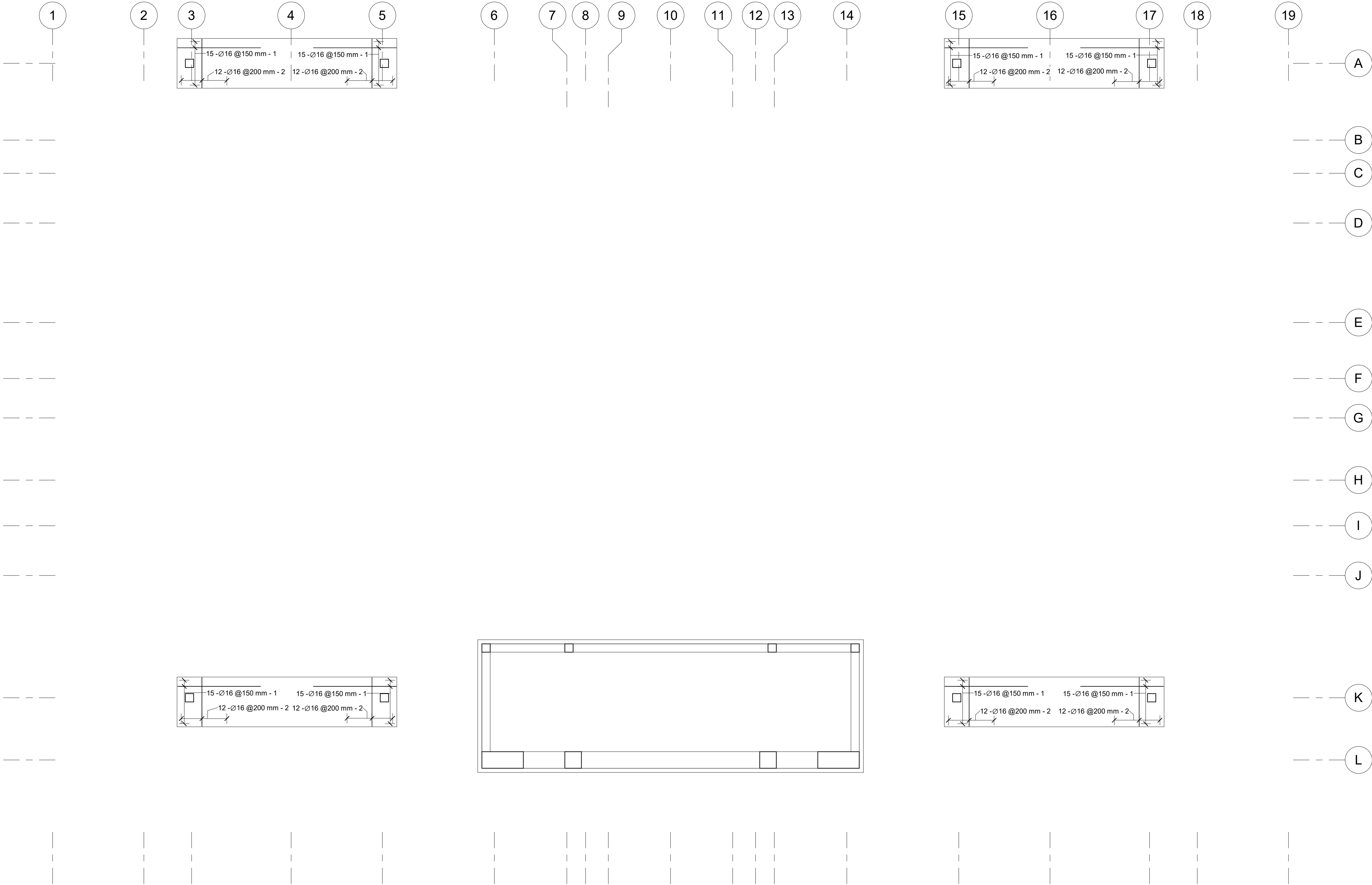
Court of Benghazi North		
Benghazi		
Roof Slabs SR2 to SR4 Main Bottom Reinforcement		ST-RT-95-00
SCALE:	1 : 100	DATE: February 2021
DESIGNED:	Refaat Elburki	
DRAWN:	Awad Edrees	

Roof Slabs SR2 to SR4 Main Top Rebar Schedule						
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)
1	16 mm	64	10550 mm	675 m	10550 mm	1066
2	16 mm	212	2350 mm	498 m	2350 mm	786
3	16 mm	87	5950 mm	518 m	5950 mm	817
4	16 mm	21	18150 mm	381 m	18150 mm	602
		384		2072 m		3271

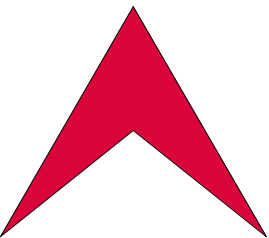


1 Roof Slabs SR2 to SR4 Main Top Reinforcement
1 : 100

Roof Slabs SR2 to SR4 Additional Top Rebar Schedule							
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	Weight (Kg)	Image
1	16 mm	120	4000 mm	480 m	4000 mm	758	
2	16 mm	96	2350 mm	226 m	2350 mm	356	
		216		706 m		1114	



1 Roof Slabs SR2 to SR4 Additional Top Reinforcement
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

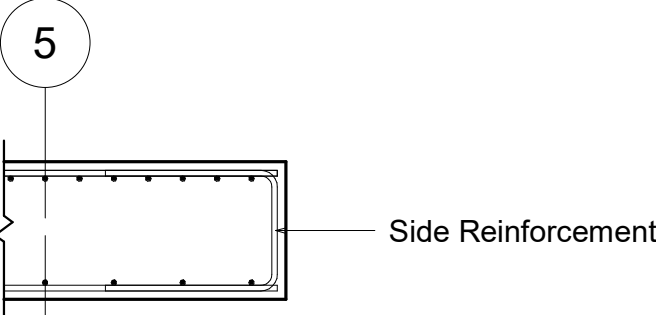


شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

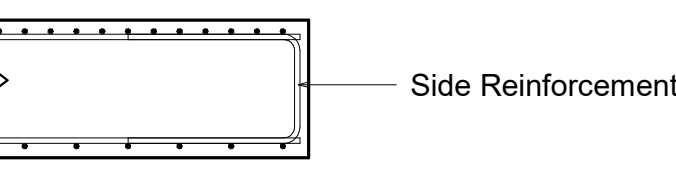
Court of Benghazi North		
Benghazi		
Roof Slabs SR2 to SR4 Additional Top Reinforcement		ST-RT-97-00
SCALE:	1 : 100	DATE: February 2021
DESIGNED:	Refaat Elburki	
DRAWN:	Awad Edrees	

Roof Slabs SR2 to SR4 Side Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Image
1	16 mm	128	1280 mm	164 m	500 mm	350 mm	500 mm	259	
2	16 mm	424	1250 mm	530 m	500 mm	320 mm	500 mm	837	
		552		694 m				1095	



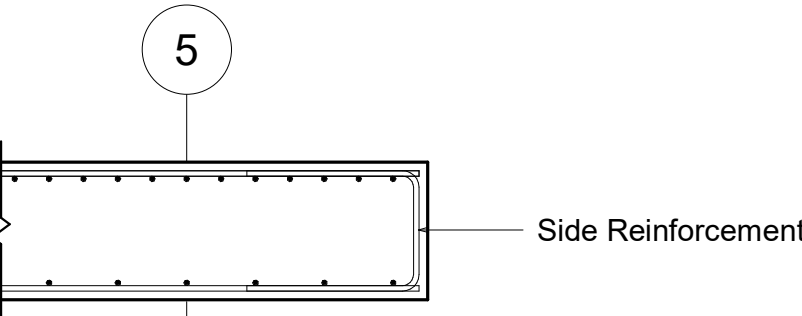
Roof Slabs SR2 to SR4 Side Reinforcement (Section 1)

1 : 20



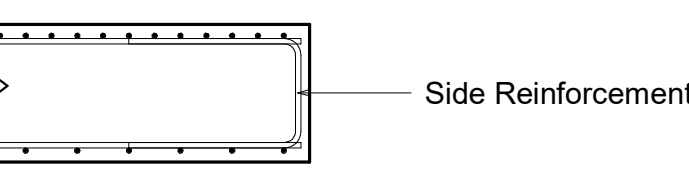
Roof Slabs SR2 to SR4 Side Reinforcement (Section 2)

1 : 20



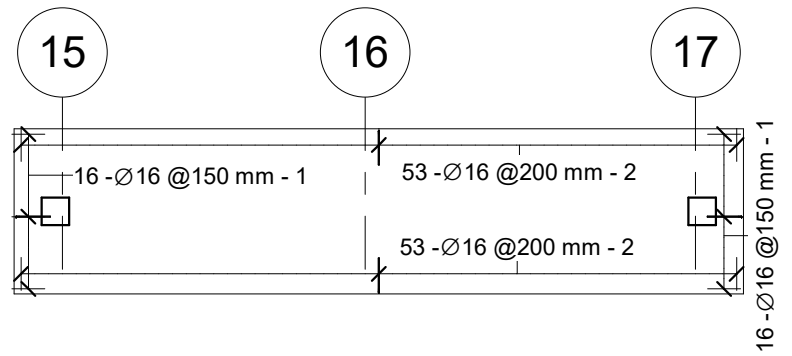
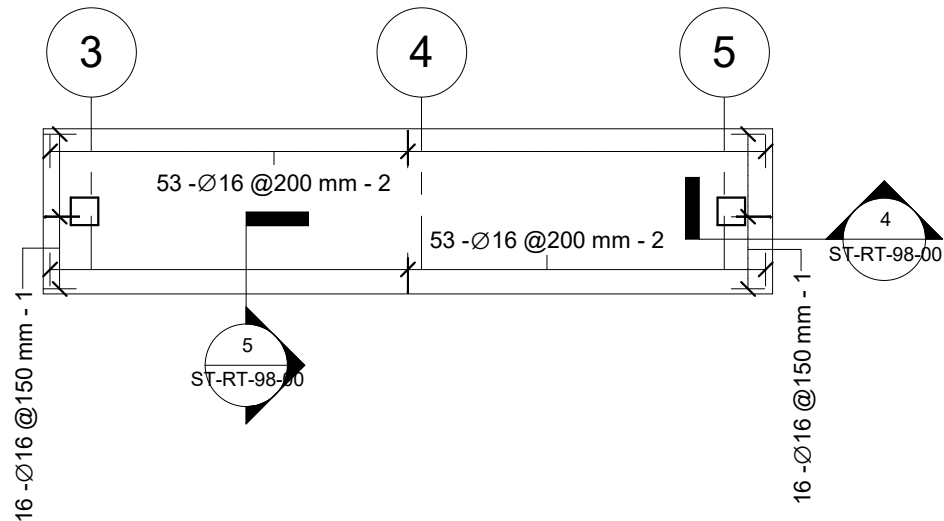
Roof Slabs SR2 to SR4 Side Reinforcement (Section 3)

1 : 20



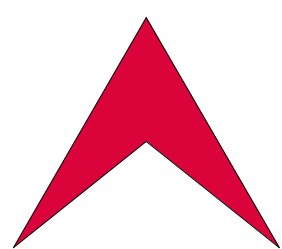
Roof Slabs SR2 to SR4 Side Reinforcement (Section 4)

1 : 20



Roof Slabs SR2 to SR4 Side Reinforcement

1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi

Roof Slabs SR2 to SR4 Side Reinforcement

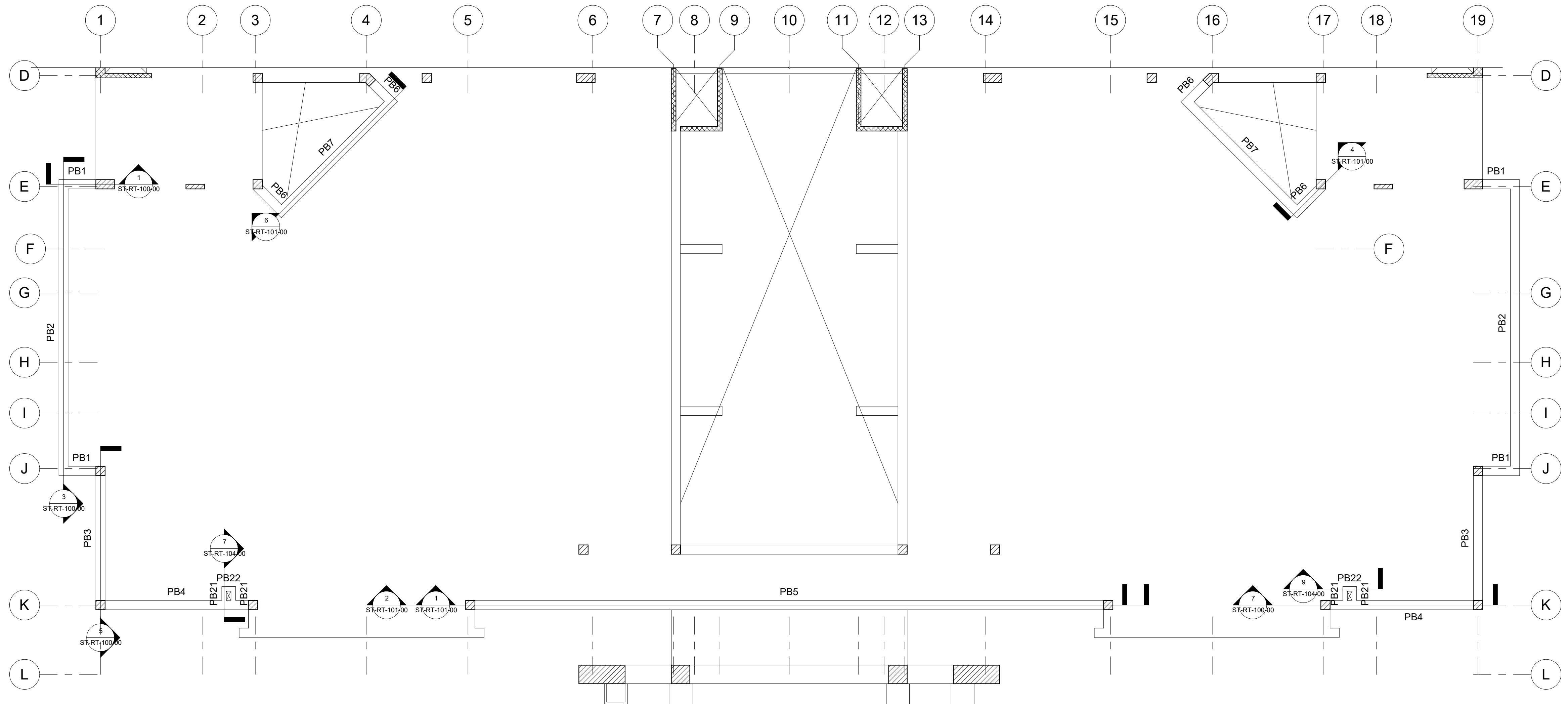
ST-RT-98-00

SCALE: As indicated

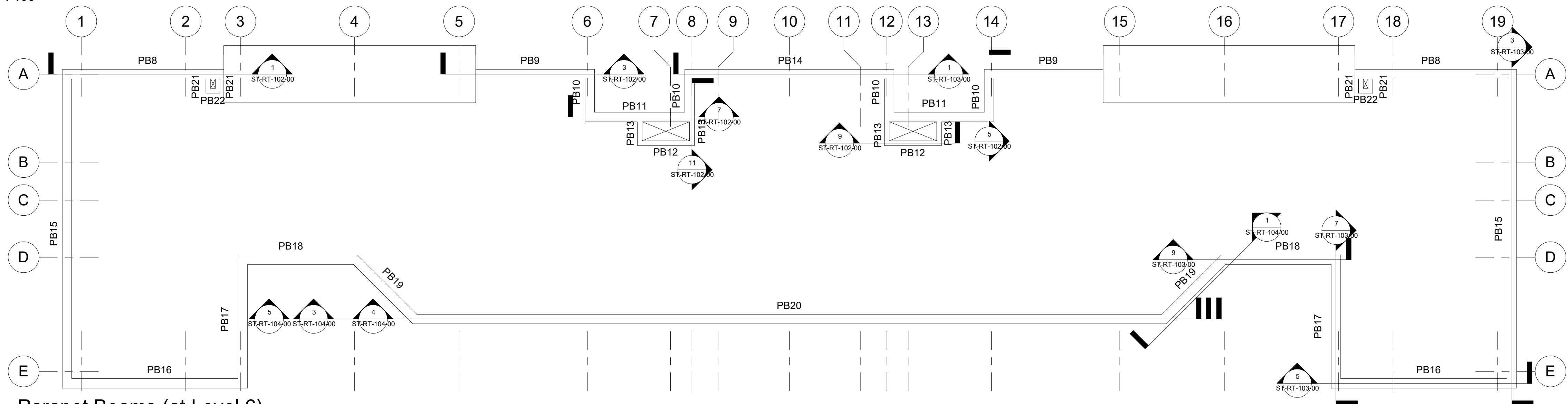
DATE: February 2021

DESIGNED: Refaat Elburki

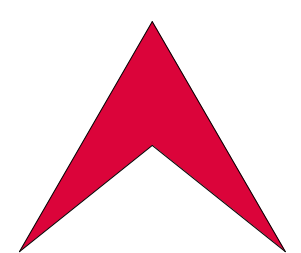
DRAWN: Awad Edrees



1 Parapet Beams (at Level 5)
1 : 100



2 Parapet Beams (at Level 6)
1 : 100



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

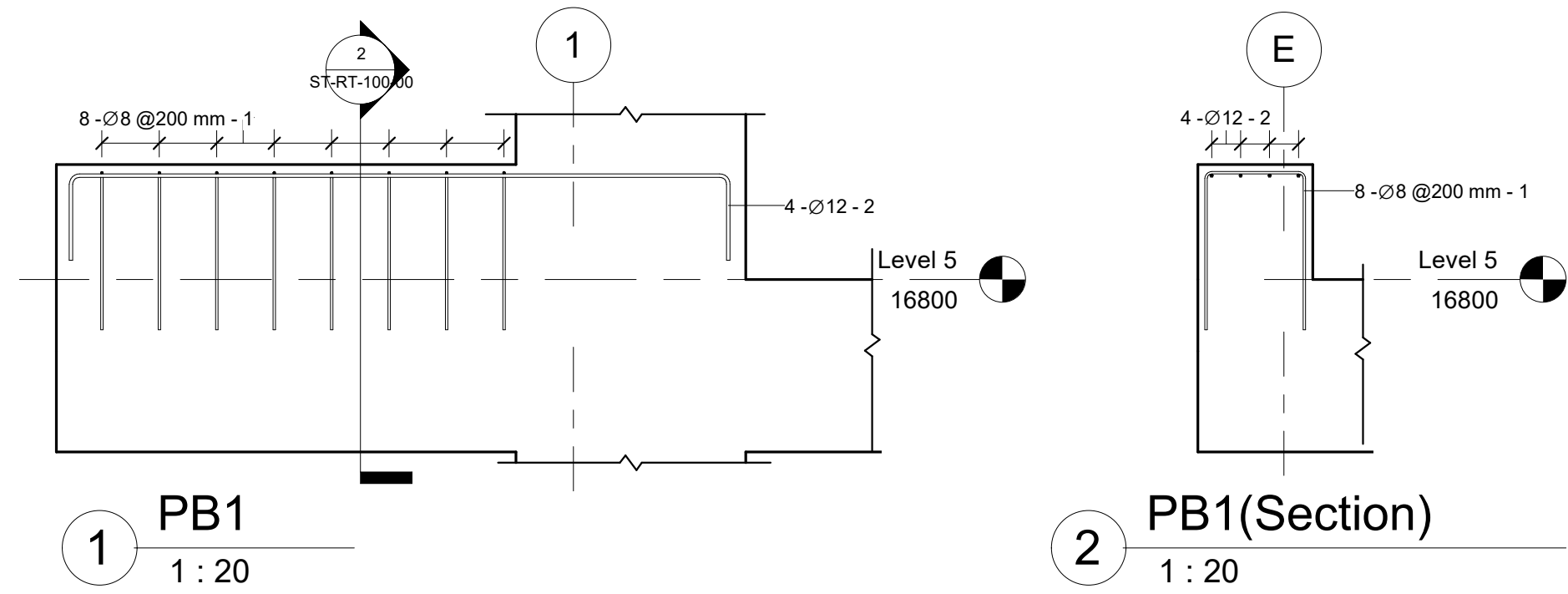
Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Parapet Beams Layout

SCALE: 1 : 100
DESIGNED: Refaat Elburki
DRAWN: Awad Edrees

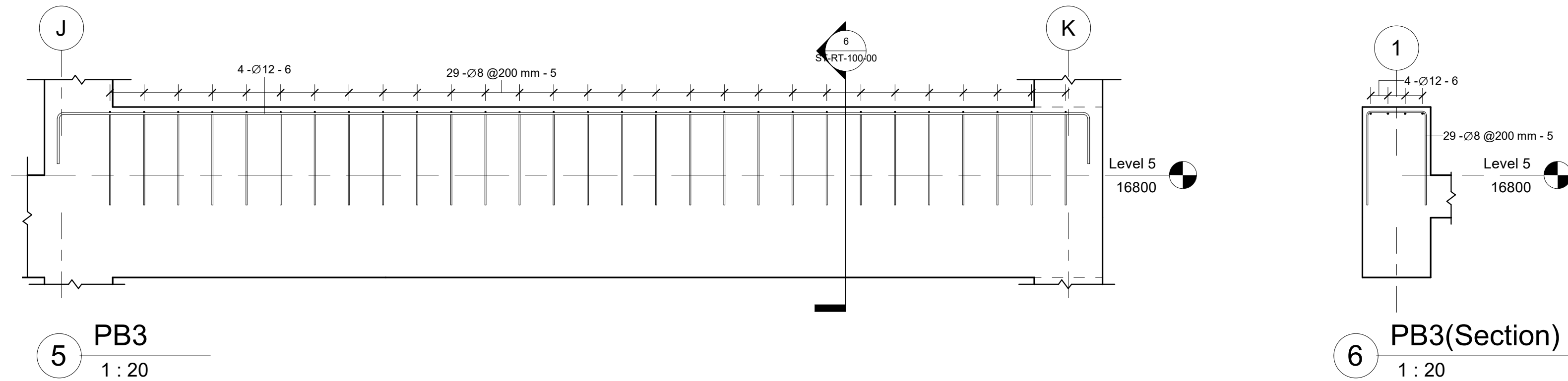
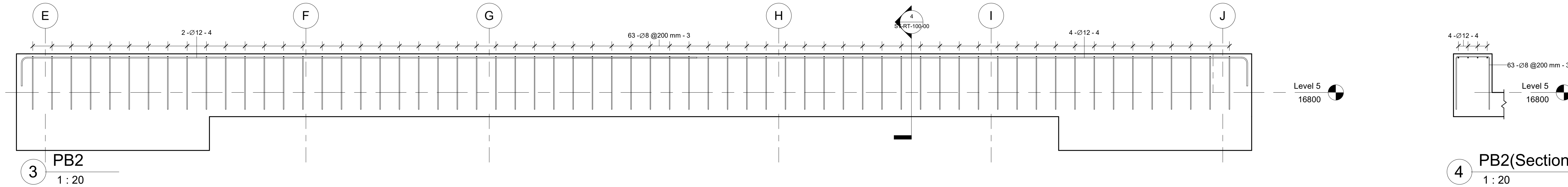
DATE: February 2021

ST-RT-99-00

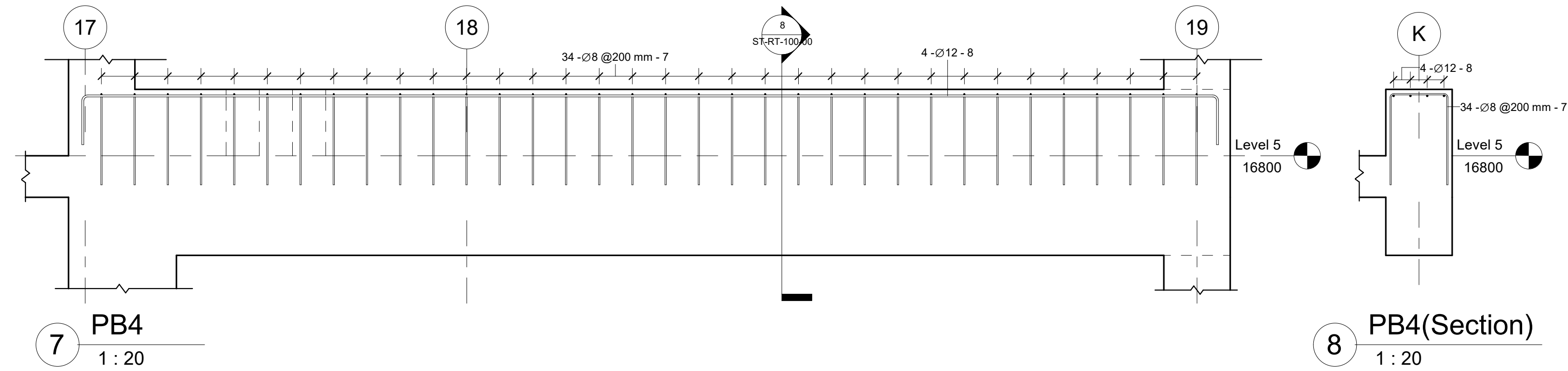


PB1 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 4 Beams	Image
1	8 mm	8	1420 mm	11 m	550 mm	350 mm	550 mm	4	18	
2	12 mm	4	2850 mm	11 m	300 mm	2300 mm	300 mm	10	40	
		12	23 m				15		58	

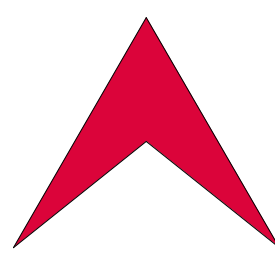
PB2 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
3	8 mm	63	1420 mm	89 m	550 mm	350 mm	550 mm	35	71	
4	12 mm	6	7260 mm	44 m	300 mm	7000 mm	0 mm	39	77	
		69	133 m				74		148	



PB3 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
5	8 mm	29	1420 mm	41 m	550 mm	350 mm	550 mm	16	32	
6	12 mm	4	6600 mm	26 m	300 mm	6050 mm	300 mm	23	47	
		33	68 m				40		79	



PB4 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
7	8 mm	34	1420 mm	48 m	550 mm	350 mm	550 mm	19	38	
8	12 mm	4	7400 mm	30 m	300 mm	6850 mm	300 mm	26	53	
		38	78 m				45		91	

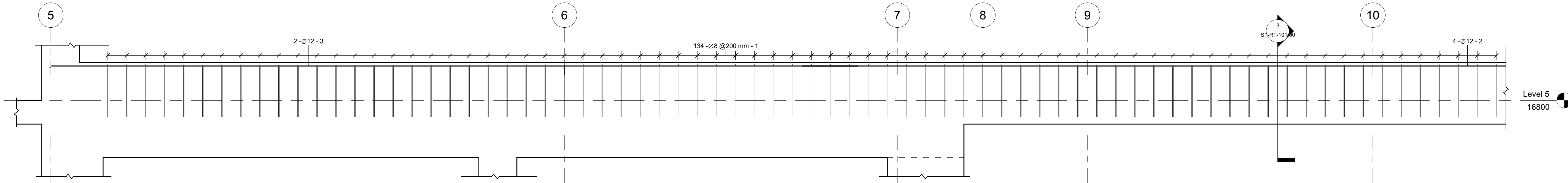

L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

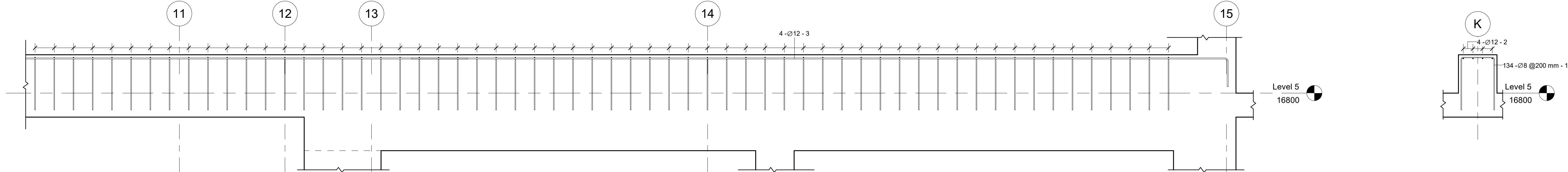
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

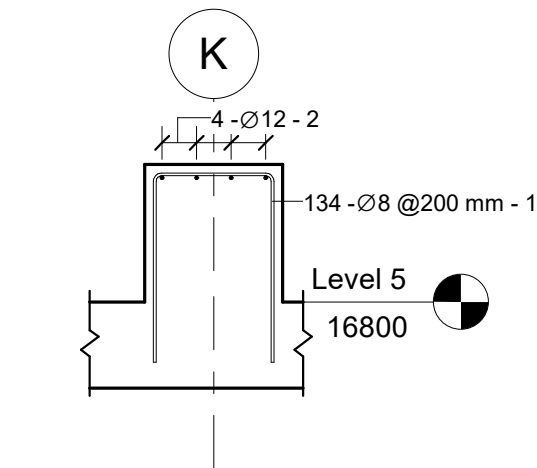
Court of Benghazi North Benghazi Parapet Beams PB1 to PB4			ST-RT-100-00		
SCALE: 1 : 20		DATE: February 2021			
DESIGNED: Refaat Elburki					
DRAWN: Awad Edrees					



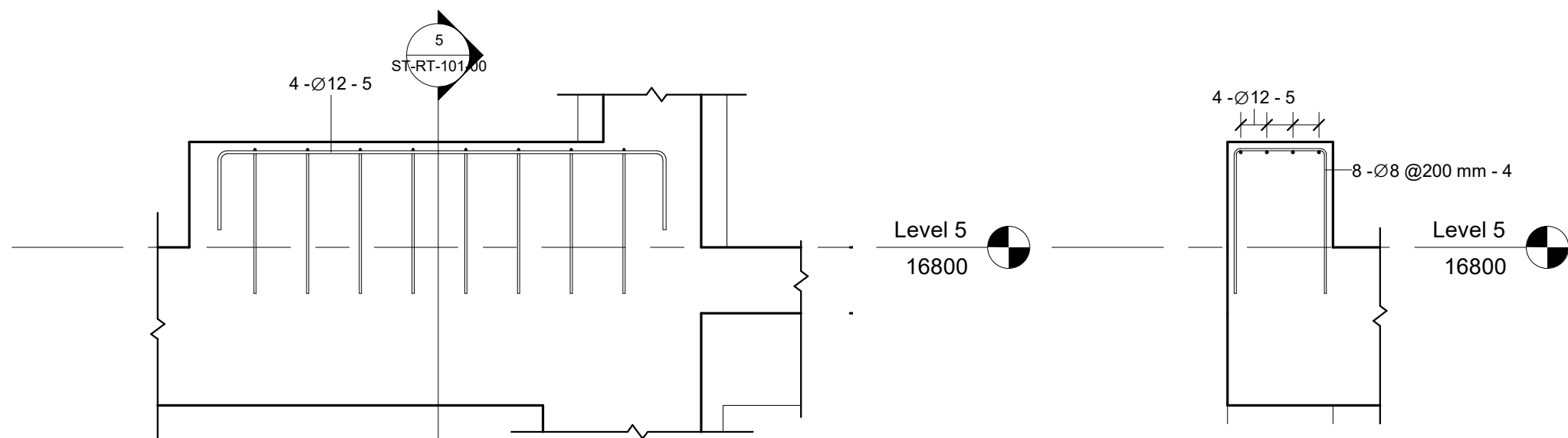
1 PB5 (Part1)
1 : 20



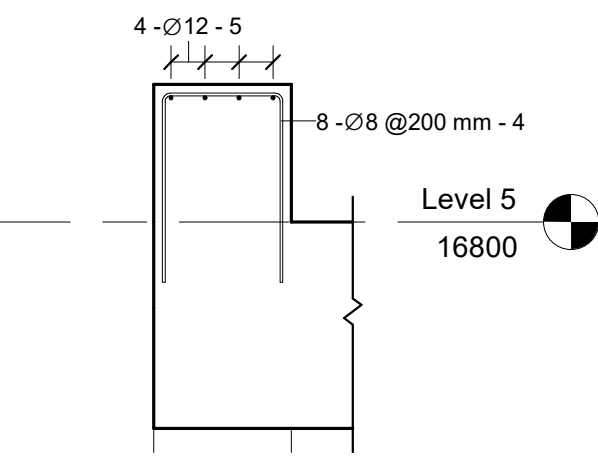
2 PB5 (Part2)
1 : 20



3 PB5(Section)
1 : 20



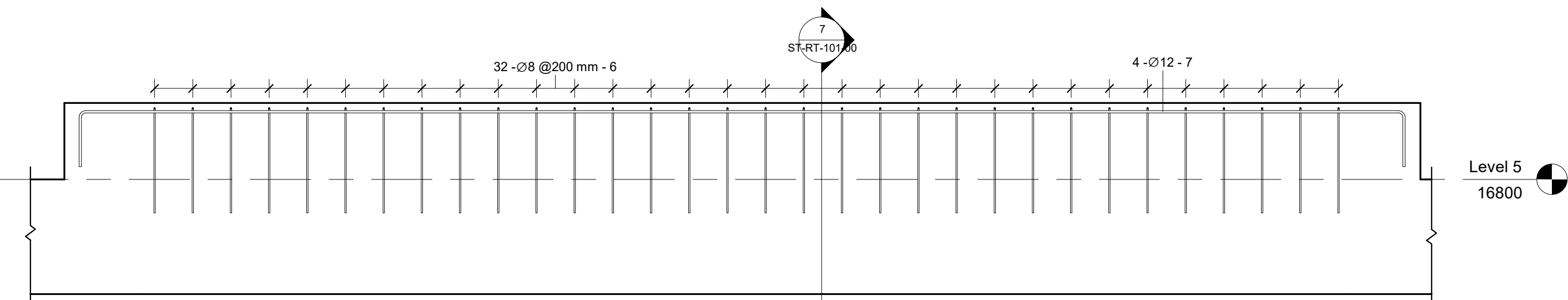
4 PB6
1 : 20



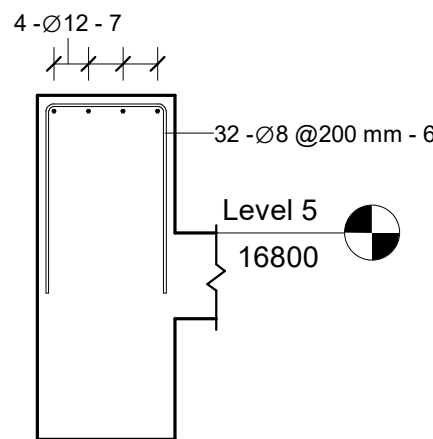
5 PB6(Section)
1 : 20

PB6 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 4 Beams	Image
4	8 mm	8	1420 mm	11 m	550 mm	350 mm	550 mm	4	18	
5	12 mm	4	2250 mm	9 m	300 mm	1700 mm	300 mm	8	32	
		12			20 m			12	50	

PB5 Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Image
1	8 mm	134	1420 mm	190 m	550 mm	350 mm	550 mm	75	
2	12 mm	4	12000 mm	48 m	12000 mm	0 mm	0 mm	43	
3	12 mm	6	8780 mm	53 m	300 mm	8500 mm	0 mm	47	
		144	291 m					164	

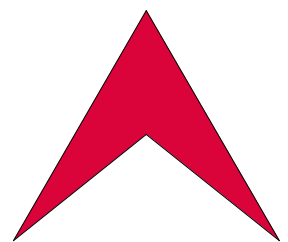


6 PB7
1 : 20



7 PB7(Section)
1 : 20

PB7 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
6	8 mm	32	1420 mm	45 m	550 mm	350 mm	550 mm	18	36	
7	12 mm	4	7480 mm	30 m	290 mm	6940 mm	290 mm	27	53	
		36			75 m			44	89	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229

شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويحات الغربية
شارع العامرية



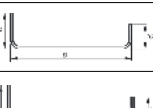
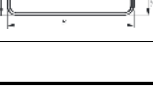
Rev.	AMENDMENT	DATE

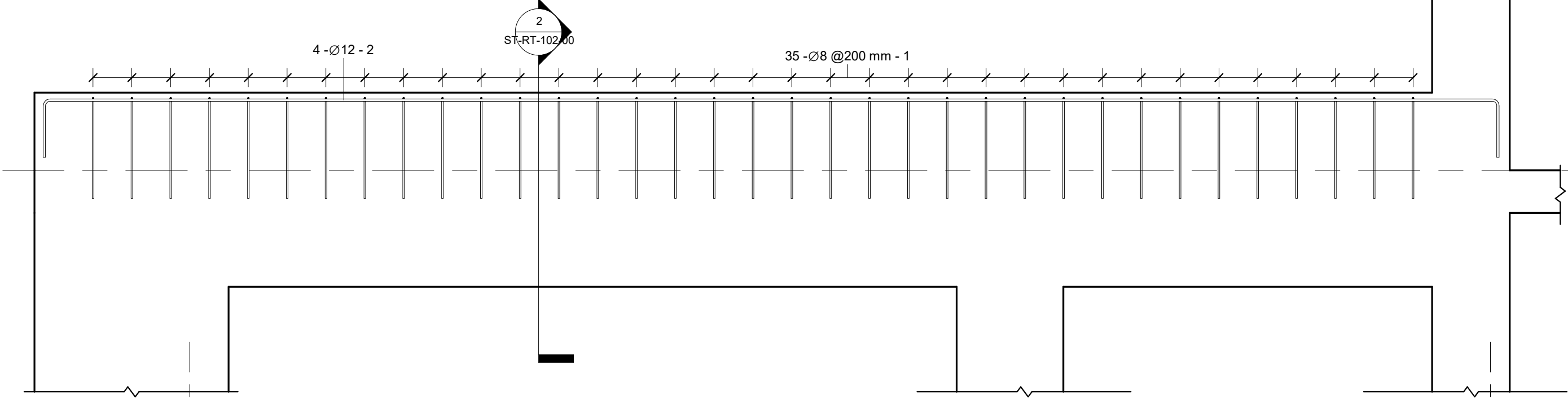
Court of Benghazi North
Benghazi
Parapet Beams PB5 to PB7

ST-RT-101-00

SCALE: 1 : 20	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	

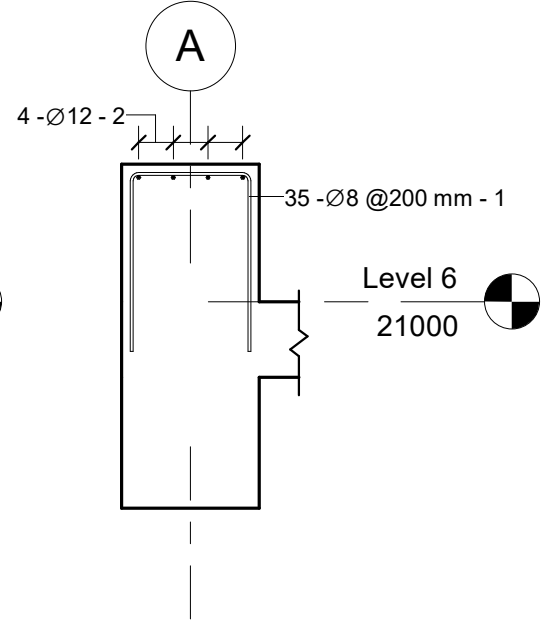
1

PB8 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
1	8 mm	35	1360 mm	48 m	520 mm	350 mm	520 mm	19	38	
2	12 mm	4	8050 mm	32 m	300 mm	7500 mm	300 mm	29	57	
		39			80 m				47	95

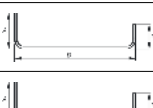


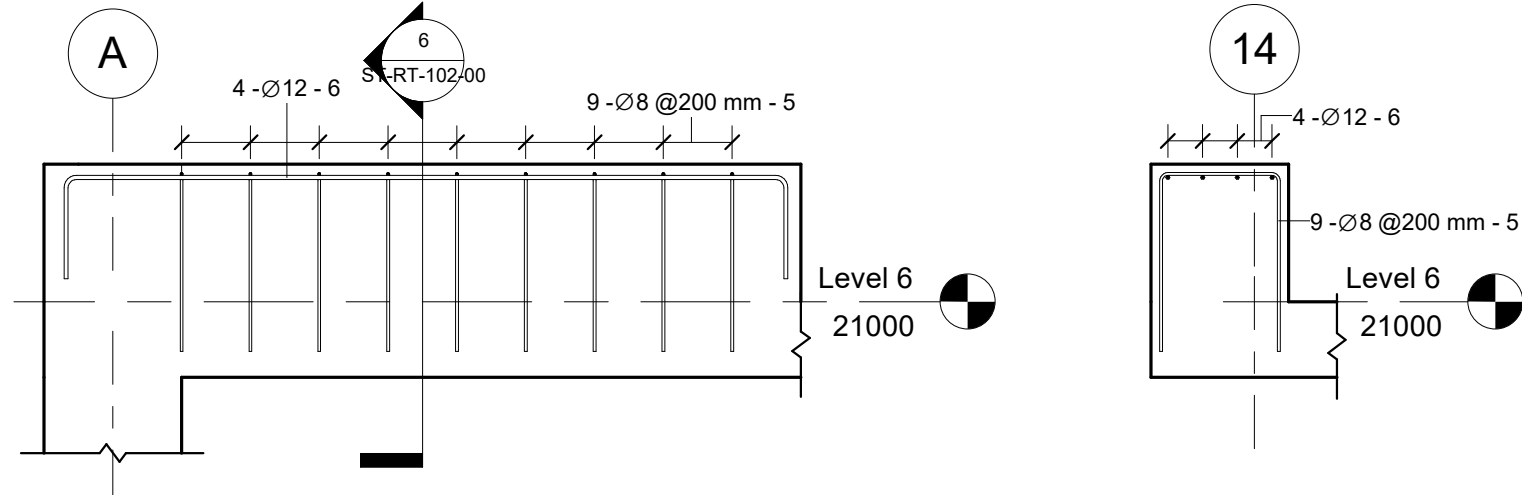
1 PB8
1 : 20

3



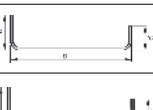
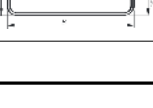
2 PB8(Section)
1 : 20

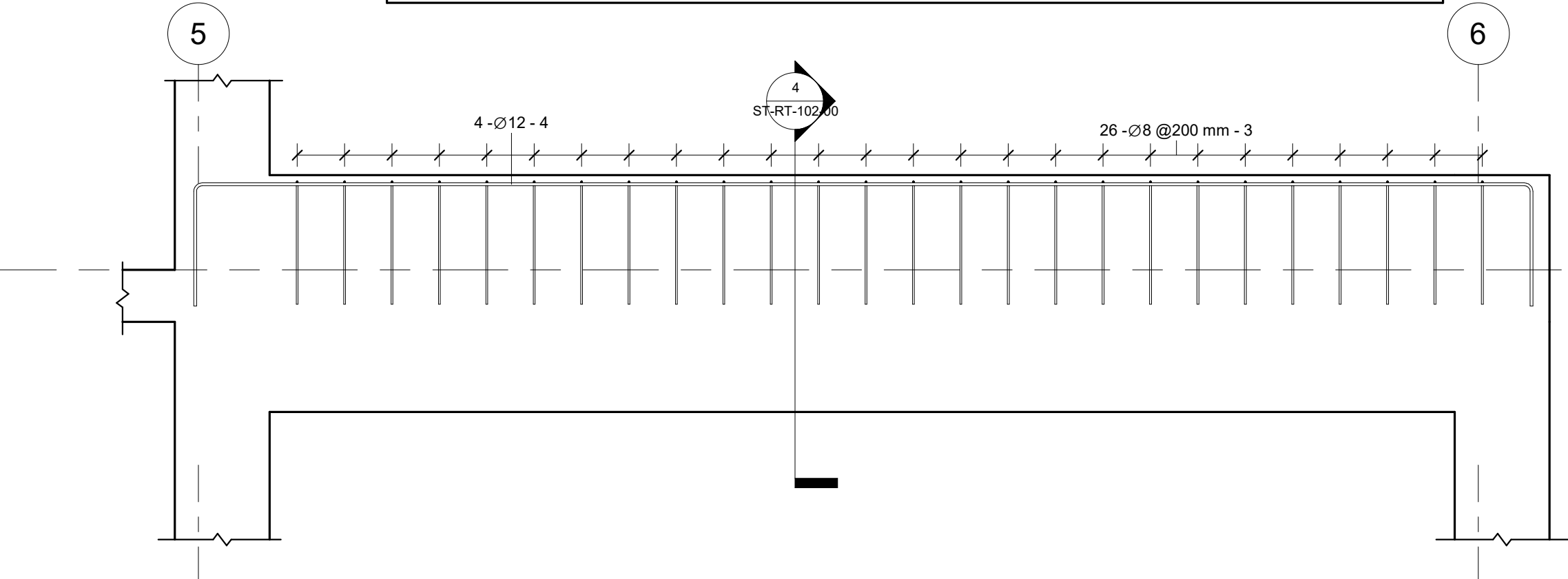
PB10 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
5	8 mm	9	1360 mm	12 m	520 mm	350 mm	520 mm	5	19	
6	12 mm	4	2650 mm	11 m	300 mm	2100 mm	300 mm	9	38	
		13			23 m				14	57



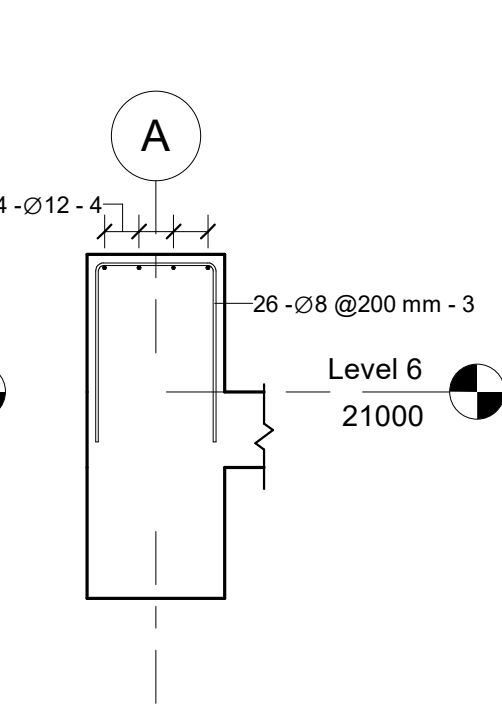
5 PB10
1 : 20

6 PB10(Section)
1 : 20

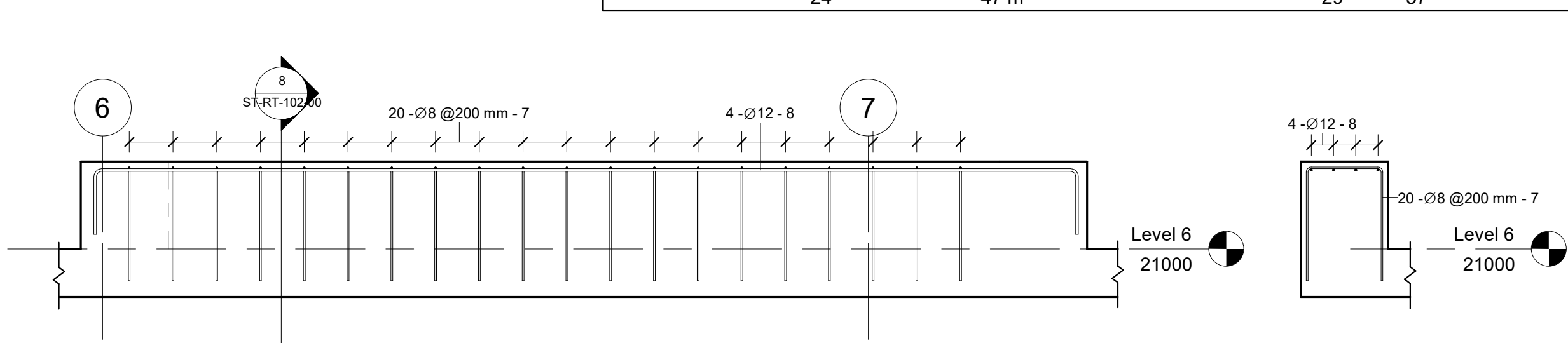
PB9 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
3	8 mm	26	1360 mm	35 m	520 mm	350 mm	520 mm	14	28	
4	12 mm	4	6640 mm	27 m	520 mm	5650 mm	520 mm	24	47	
		30			62 m				38	75



3 PB9
1 : 20

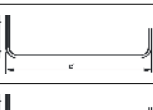
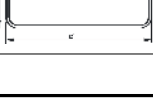


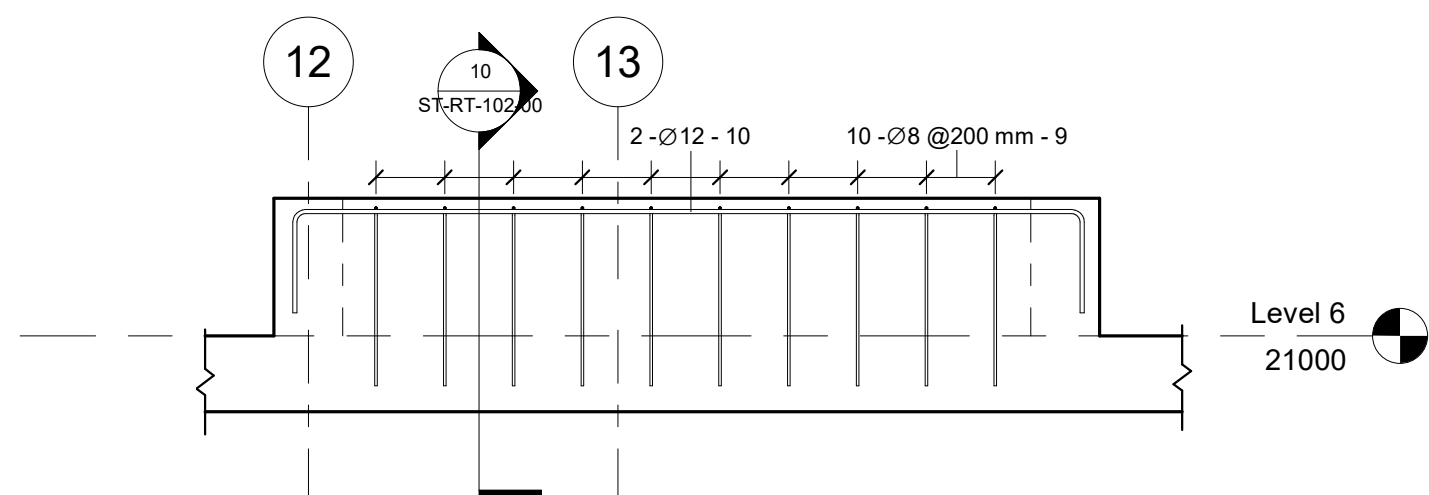
4 PB9(Section)
1 : 20



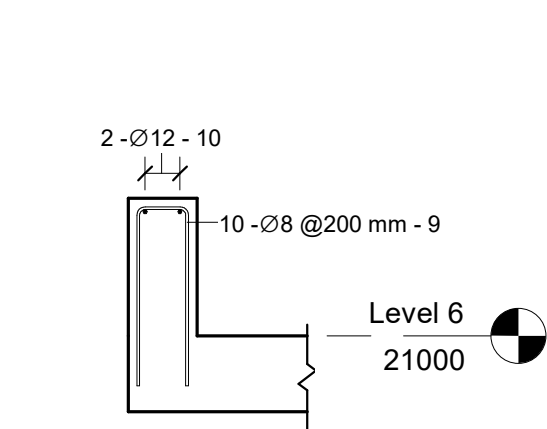
7 PB11
1 : 20

8 PB11(Section)
1 : 20

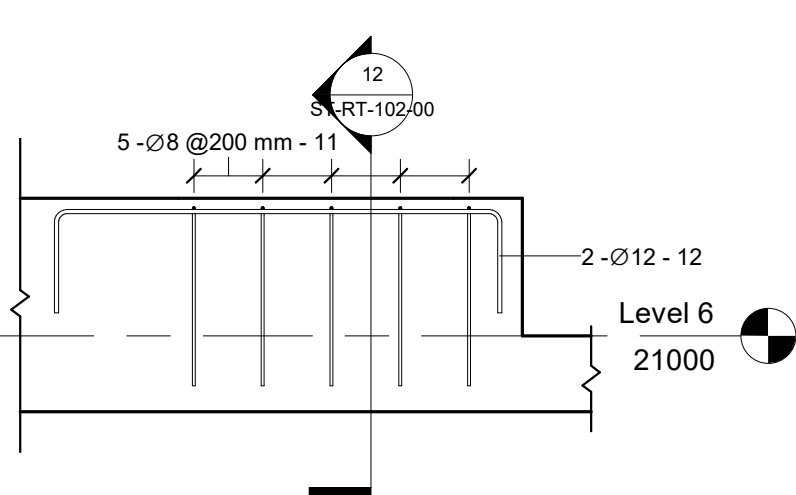
PB11 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
7	8 mm	20	1360 mm	27 m	520 mm	350 mm	520 mm	11	21	
8	12 mm	4	5050 mm	20 m	300 mm	4500 mm	300 mm	18	36	
		24			47 m				29	57



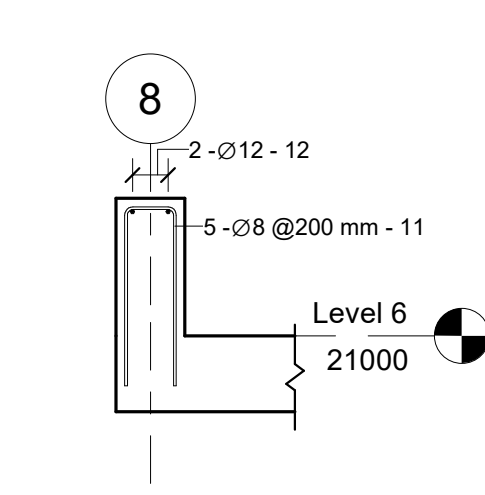
9 PB12
1 : 20



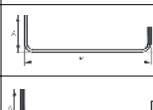
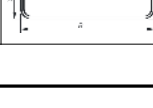
10 PB12(Section)
1 : 20

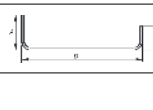
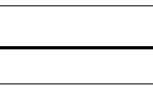


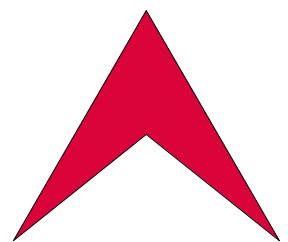
11 PB13
1 : 20



12 PB13(Section)
1 : 20

PB12 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
9	8 mm	10	1160 mm	12 m	520 mm	150 mm	520 mm	5	9	
10	12 mm	2	2850 mm	6 m	300 mm	2300 mm	300 mm	5	10	
		12			17 m				10	19

PB13 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
11	8 mm	5	1160 mm	6 m	520 mm	150 mm	520 mm	2	9	
12	12 mm	2	1850 mm	4 m	300 mm	1300 mm	300 mm	3	13	
		7			10 m				6	22



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



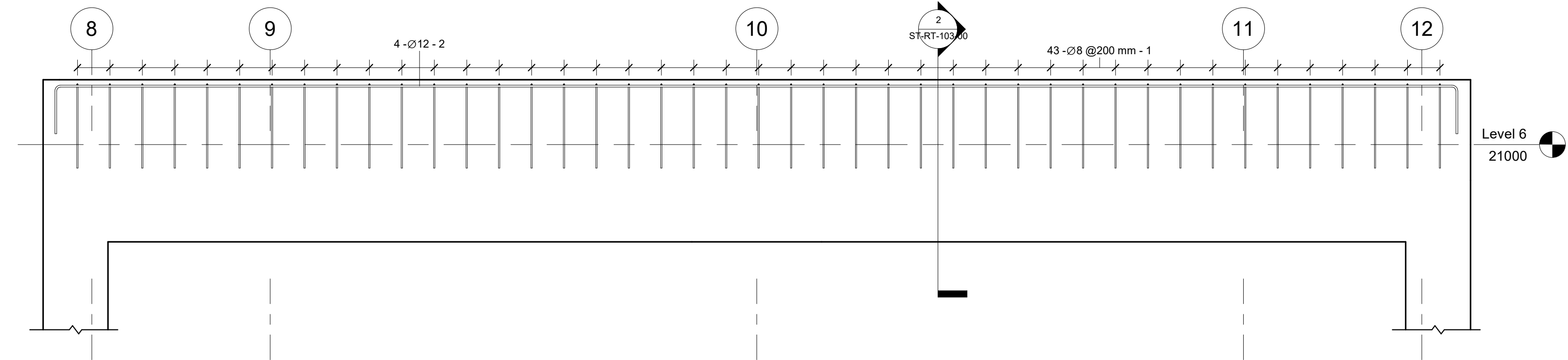
شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

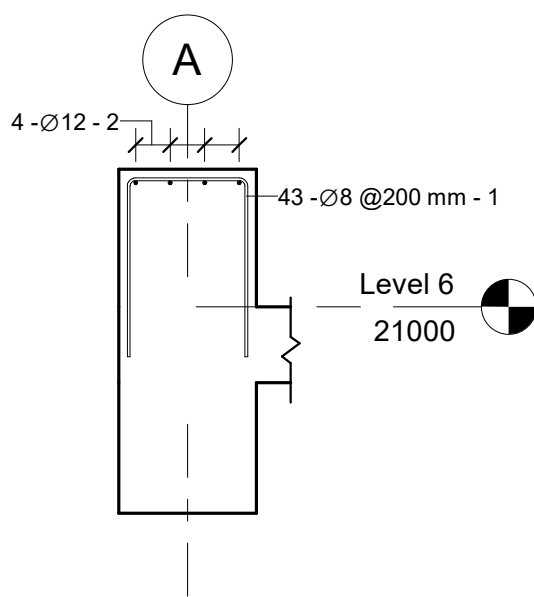
Court of Benghazi North
Benghazi
Parapet Beams PB8 to PB13

ST-RT-102-00

SCALE: 1 : 20	DATE: February 2021
DESIGNED: Refaat Elburki	
DRAWN: Awad Edrees	



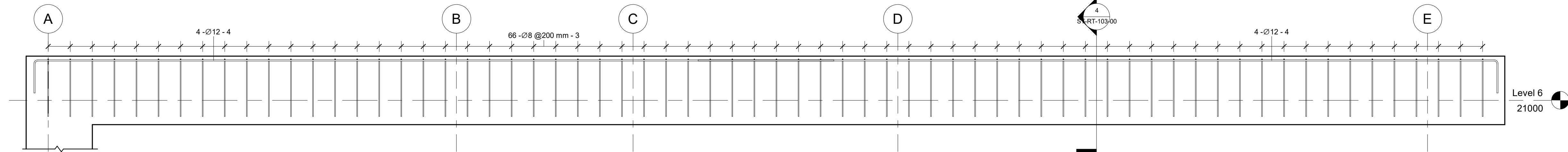
1 PB14
1 : 20



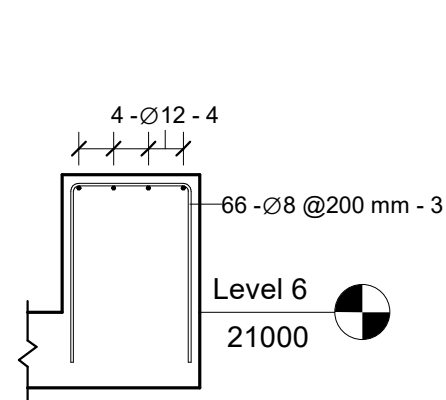
2 PB14(Section)
1 : 20

PB14 Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Image
1	8 mm	43	1360 mm	58 m	520 mm	350 mm	520 mm	23	
2	12 mm	4	9200 mm	37 m	300 mm	8650 mm	300 mm	33	
		47	95 m				56		

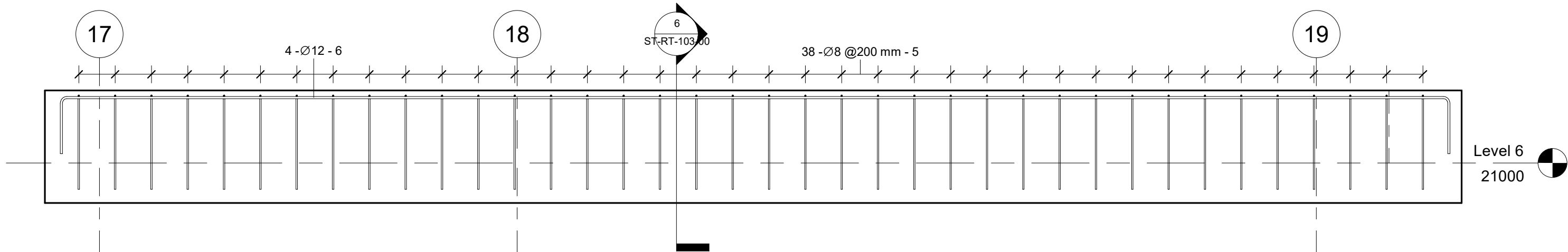
PB15 Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams
3	8 mm	66	1360 mm	90 m	520 mm	350 mm	520 mm	35	71
4	12 mm	8	7530 mm	60 m	300 mm	7250 mm	0 mm	53	107
		74	150 m				89		178



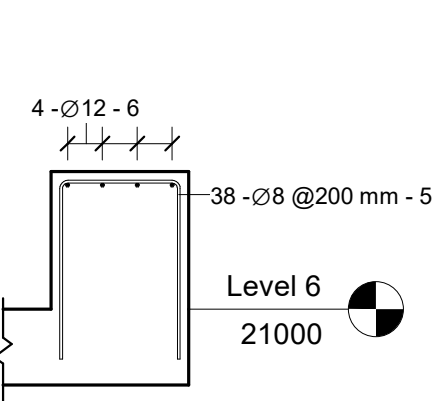
3 PB15
1 : 20



4 PB15(Section)
1 : 20

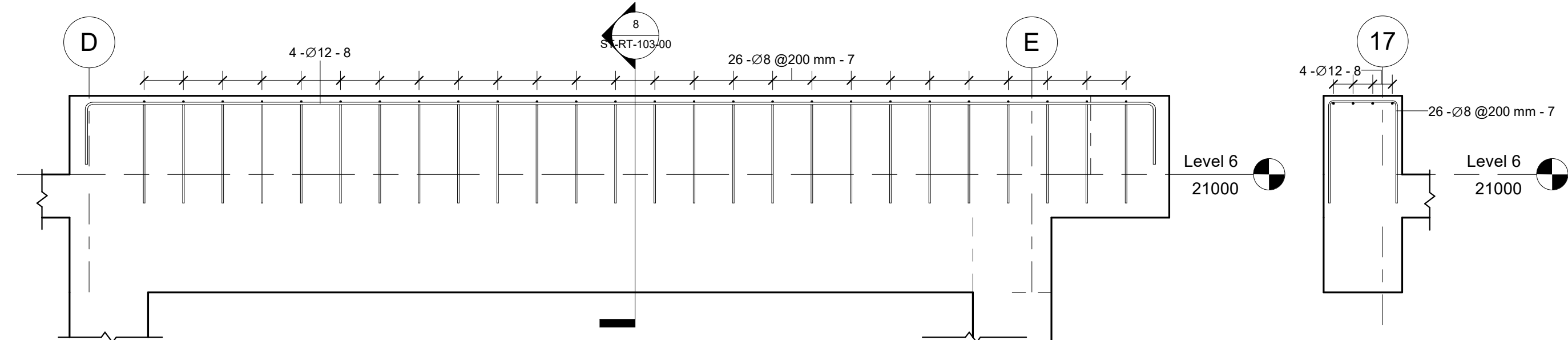


5 PB16
1 : 20

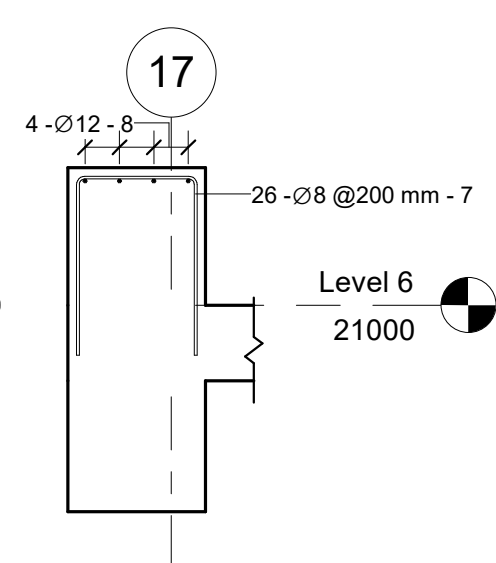


6 PB16(Section)
1 : 20

PB16 Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams
5	8 mm	38	1360 mm	52 m	520 mm	350 mm	520 mm	20	41
6	12 mm	4	8230 mm	33 m	320 mm	7650 mm	320 mm	29	58
		42	85 m				50		99

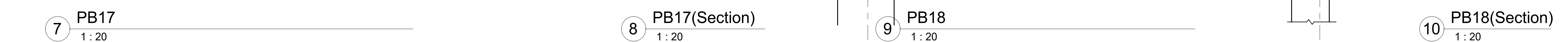


7 PB17
1 : 20



8 PB17(Section)
1 : 20

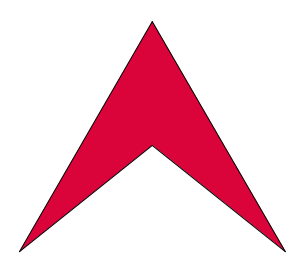
PB17 Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams
7	8 mm	26	1360 mm	35 m	520 mm	350 mm	520 mm	14	28
8	12 mm	4	6030 mm	24 m	320 mm	5450 mm	320 mm	21	43
		30	59 m				35		71



9 PB18
1 : 20

10 PB18(Section)
1 : 20

PB18 Rebar Schedule									
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams
9	8 mm	23	1360 mm	31 m	520 mm	350 mm	520 mm	12	25
10	12 mm	4	5230 mm	21 m	320 mm	4650 mm	320 mm	19	37
		27	52 m				31		62



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهات الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi

Parapet Beams PB14 to PB18

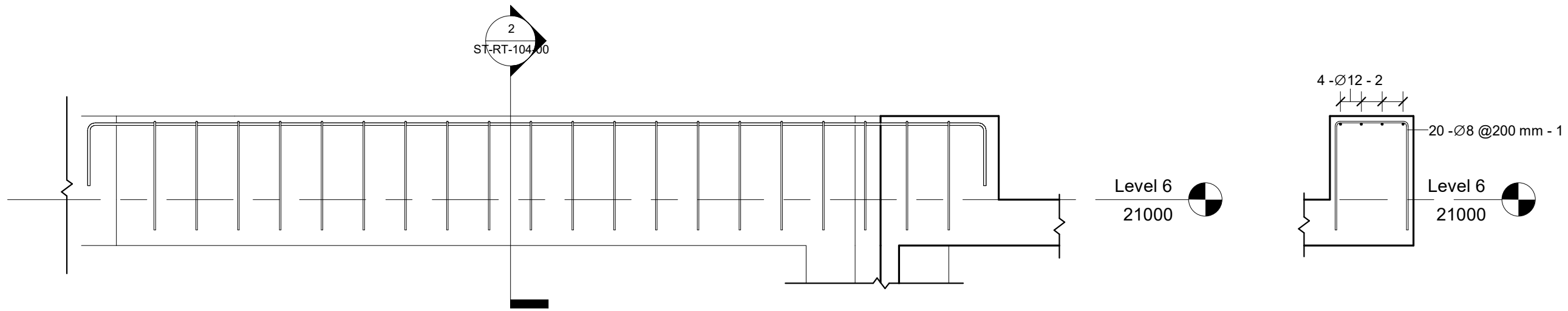
SCALE: 1 : 20

DESIGNED: Refaat Elburki

DRAWN: Awad Edrees

DATE: February 2021

ST-RT-103-00

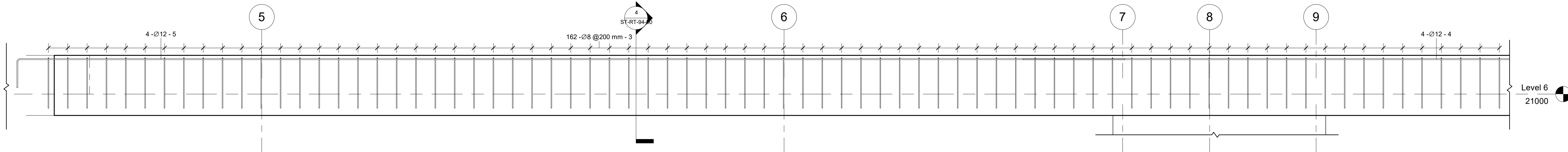


PB19 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
1	8 mm	20	1360 mm	27 m	520 mm	350 mm	520 mm	11	21	
2	12 mm	4	4850 mm	19 m	300 mm	4300 mm	300 mm	17	34	
24			47 m				28		56	

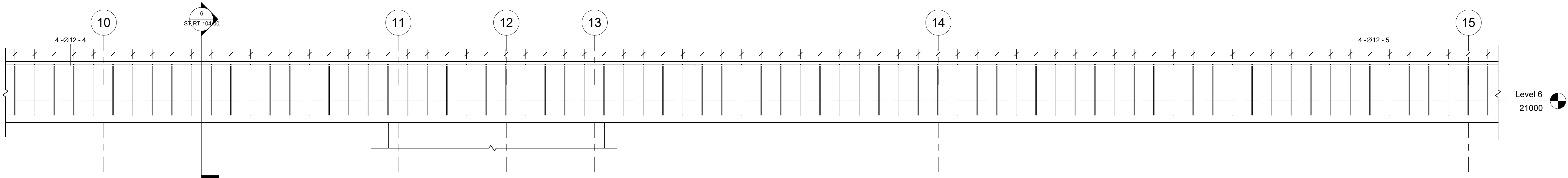
PB20 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 2 Beams	Image
3	8 mm	162	1360 mm	220 m	520 mm	350 mm	520 mm	87		
4	12 mm	4	12060 mm	48 m	12060 mm	0 mm	0 mm	43		
5	12 mm	8	11730 mm	94 m	300 mm	11450 mm	0 mm	83		
174			362 m				213			

1 PB19
1 : 20

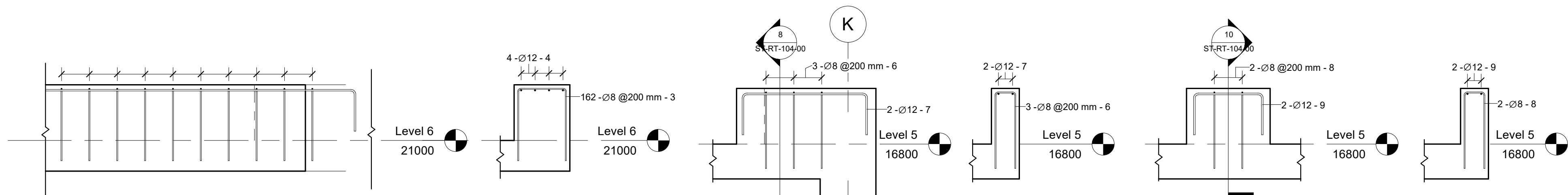
2 PB19(Section)
1 : 20



3 PB20(Part1)
1 : 20



4 PB20(Part2)
1 : 20



5 PB20(Part3)
1 : 20

6 PB20(Section)
1 : 20

7 PB21
1 : 20

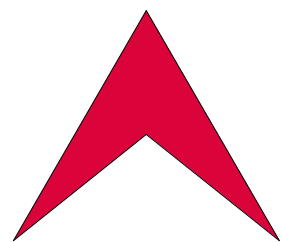
8 PB21(Section)
1 : 20

9 PB22
1 : 20

10 PB22(Section)
1 : 20

PB21 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 8 Beams	Image
6	8 mm	3	1220 mm	4 m	550 mm	150 mm	550 mm	1	12	
7	12 mm	2	1450 mm	3 m	300 mm	900 mm	300 mm	3	21	
5			7 m				4		32	

PB22 Rebar Schedule										
Rebar Number	Bar Diameter	Quantity	Bar Length	Total Bar Length	A	B	C	Weight (Kg)	Weight of 4 Beams	Image
8	8 mm	2	1220 mm	2 m	550 mm	150 mm	550 mm	1	4	
9	12 mm	2	1050 mm	2 m	300 mm	500 mm	300 mm	2	7	
4			5 m				3		11	



L Libyan
C Center
E For Engineering
C Consultancy
Certified From Autodesk

البركة
شارع جمال عبد الناصر
Noaman Tower
Benghazi-Libya
LCEC@mail.com
Mobile +218 92 512 3567
Mobile +218 91 857 1229



شركة اهل الثقة للمقاولات العامة
ليبيا - بنغازي
الفويهاة الغربية
شارع العامرية

Rev.	AMENDMENT	DATE

Court of Benghazi North
Benghazi
Parapet Beams PB19 & PB20

ST-RT-104-00

SCALE: 1 : 20

DATE: February 2021

DESIGNED: Refaat Elburki

DRAWN: Awad Edrees